

75
-001

PERSPECTIVES

ON LABOUR AND INCOME

Catalogue 75-001E



SUMMER 1989

- YOUTH FOR HIRE
- CANADA'S
UNEMPLOYMENT
MOAIC
- ON MATERNITY
LEAVE
- THE CHANGING
FACE OF
TEMPORARY HELP
- BILINGUALISM AND
EARNINGS



Statistics
Canada

Statistique
Canada

Canada

At Your Service...

Statistics Canada's Reference Centres in Canada's Major Cities

St. John's	(772-4073)
Halifax	(426-5331)
Montreal	(283-5725)
Ottawa	(951-8116)
Toronto	(973-6586)
Winnipeg	(983-4020)
Regina	(780-5405)
Edmonton	(495-3027)
Calgary	(292-6717)
Vancouver	(666-3691)

How to Order Publications

This and other Statistics Canada publications may be purchased from local authorized agents and other community bookstores, through the local Statistics Canada offices, or by mail order to Publication Sales, Statistics Canada, Ottawa, K1A 0T6.

1 (613) 951-7277

National toll free order line 1-800-267-6677 (Toronto
Credit card only: 973-8018)

Toll-free access is provided in all provinces and territories, for users who reside outside the local dialing area of any of the regional reference centres.

Newfoundland and Labrador	1-800-563-4255
Nova Scotia, New Brunswick and Prince Edward Island	1-800-565-7192
Quebec	1-800-361-2831
Ontario	1-800-268-1151
Manitoba	1-800-542-3404
Saskatchewan	1-800-667-7164
Alberta	1-800-282-3907
Southern Alberta	1-800-472-9708
British Columbia (South and Central)	1-800-663-1551
Yukon and Northern B.C. (area served by NorthwTel Inc.)	Zenith 0-8913
Northwest Territories (area served by NorthwTel Inc.)	Call collect 403-495-2011

PERSPECTIVES

ON LABOUR AND INCOME

Articles

7 Youth for Hire

Gary L. Cohen

A comparison of youth labour market conditions in 1977 and 1987 shows several important changes. Demographic shifts and rising school attendance rates are among the influences examined. The diverse experiences of students and out-of-school youths, of teenagers and young adults, are highlighted.

15 Canada's Unemployment Mosaic

David Gower

From 1985 to 1988, the national unemployment rate declined sharply but regional patterns varied considerably. The unemployment rate and other labour market measures for 40 subprovincial areas are used in this study of the increase in regional unemployment disparities observed in recent years.

26 On Maternity Leave

Joanne Moloney

The fertility rate continues to decline but interest in maternity leave is growing as more women of child-bearing age join the labour force. This article looks at maternity absences among working women by age, education and province. It also explores the links between the fertility rate and maternity absences and between compensation and length of absence.

43 The Changing Face of Temporary Help

Ernest B. Akyeampong

How does the temporary help worker differ from the "average worker"? This profile covers characteristics such as age, sex, marital status, education, occupation and earnings, with some surprising results. The role played by temporary help agencies as employers and workers adjust to changes in the business cycle is also examined.

Summer 1989

Departments

3 Forum

5 Highlights

57 Sources

67 Key Labour and Income Facts

79 In the Works

On the Cover:

Computer Artwork
The Stock Market Inc.

Perspectives on Labour and Income
(Catalogue 75-001E; aussi disponible en français, n° 75-001F au répertoire) is published four times a year under the authority of the Minister of Regional Industrial Expansion and the Minister of State for Science and Technology.
© Minister of Supply and Services Canada 1989. ISSN: 0840-8750 (75-001E), 0843-4565 (75-001F)
SUBSCRIPTION RATES: \$50 a year in Canada, \$60 elsewhere. Single issue \$12.50 in Canada, \$15 elsewhere.

50 Bilingualism and Earnings

Jean-Marc Lévesque

This study compares the earnings of bilingual and unilingual workers in three urban centres – Montreal, Toronto and Ottawa-Hull. Differences in the earnings of bilingual and unilingual workers are considered in the light of several demographic and job-related traits.

Symbols

The following standard symbols are used in Statistics Canada publications:

- .. figures not available
- ... figures not appropriate or not applicable
- nil or zero
- amount too small to be expressed
- P preliminary figures
- r revised figures
- x confidential to meet secrecy requirements of the Statistics Act

PERSPECTIVES

ON LABOUR AND INCOME

Editor in Chief

Ian Macredie
(613) 951-9456

Managing Editor

Maryanne Webber
(613) 951-6894

Editors

Henry Pold
Doreen Duchesne
Heather Clemenson

Production Coordinator

Lyne Naguib

Marketing Coordinator

Bruce Simpson

Design and Composition

Publications Division

Extracts from this publication may be reproduced for individual use without permission provided the source is fully acknowledged. However, reproduction of this publication in whole or in part for purposes of resale or redistribution requires written permission from the Programs and Publishing Products Group. Acting Permissions Officer, Crown Copyright Administration, Canadian Government Publishing Centre, Ottawa, Canada K1A 0S9.

Forum

From the Chief Statistician

■ I welcome the opportunity to introduce the first issue of *Perspectives on Labour and Income*. This new quarterly aims to provide informative analyses intended not only to further the understanding of current labour market and income issues but also to illustrate the potential use of the great variety of data available from Statistics Canada. *Perspectives* will also update readers on new or changing sources of labour and income data and on research projects underway in Statistics Canada and elsewhere. Hopefully, it will serve as a useful medium for exchanging information and ideas on labour and income issues.

I would like to extend my warm thanks to the many people within Statistics Canada and from other federal and provincial departments, research organizations, businesses and educational institutions who reviewed the proposed publication and provided useful comments on its content and presentation. I am confident that *Perspectives* will make an important contribution to socio-economic analysis in Canada.

Ivan Fellegi
Chief Statistician
of Canada



From the Editor

■ For ten years, articles on the labour market have featured regularly in *The Labour Force*, a monthly Statistics Canada publication. *Perspectives on Labour and Income* provides a new outlet for these articles. It also offers us a number of challenges: to expand the field of study to include income issues; to enrich the analysis by drawing on a variety of data sources; to address the most topical issues; and to cover a range of geographic areas.

The five articles in our first issue use data from well-known sources such as the Labour Force Survey, Survey of Employment, Payrolls and Hours and the Census, as well as from newer or less familiar sources including the Labour Market Activity Survey, the Absence from Work Survey and the Maternity Leave Survey.

Perspectives provide opportunities for you to give feedback and to share information on new developments, research in progress, publications, seminars and conferences. In addition, *Sources* brings you current news in the field including the most recent releases from special surveys.

We welcome your comments and trust that with your ongoing support we can make this quarterly a useful and valued source of information on labour and income.

Ian Macredie
Editor in Chief



Letters

■ The concept of a regular forum for the analysis of labour issues and statistics has a long history in Canada. Its origins go back to 1900 when William Lyon Mackenzie King became the first editor of the *Labour Gazette* and Deputy Minister of Labour. For over 75 years, until it was discontinued in 1978, the *Labour Gazette* provided such a forum.

Now, a decade later, Statistics Canada has correctly recognized the need for a regular publication which focuses on labour statistics and analysis and also provides a forum to explore issues of concern in the labour field. While some of the content of *Perspectives on Labour and Income* would have appeared in *The Labour Force*, what is important is that the format of the new publication emphasizes analysis and discussion. The late University of Toronto professor, Marshall McLuhan said that the medium is the message. In the case of *Perspectives* the medium is indeed the message: to encourage labour market research and analysis.

Statistics Canada is to be commended for this excellent initiative. I know that the economic and industrial relations communities will welcome this venture.

Noah M. Meltz
Chair, Advisory Committee on
Labour Statistics
Statistics Canada

Professor of Economics and Industrial
Relations
University of Toronto □

■ In the last decades, OECD countries have seen profound changes in demographic and social structures, in the level and distribution of incomes and wealth and in the nature of the labour market. It is only necessary to mention a few of them – the decline in the number of young people, the

rise in the number of lone-parent families and dual earner families, the changing composition of poorer families – to demonstrate their interlocking nature. Overall, they have greatly altered the environment in which policy is made.

From an international perspective, it is natural to look to Canada to help to understand these developments. Canada has been in the forefront of many of them. Her statistical system remains second to none. This new publication should become a much-consulted source of information about employment, incomes, and the relation between the two. And it should encourage analysts to draw more deeply from the wide range of data available to them.

John M. Evans
Directorate for Social Affairs,
Manpower and Education
Organisation for Economic
Co-operation and Development □

We welcome your views on articles and other items that have appeared in *Perspectives on Labour and Income*. Additional insights on the data are also welcome, but to be considered for publication, communications should be factual and analytical. We encourage readers to inform us about their current research projects, new publications, data sources and upcoming events relating to labour and income.

Statistics Canada reserves the right to select items for publication. Correspondence, in either official language, should be addressed to: Heather Clemenson, *Perspectives on Labour and Income*, 5-A Jean Talon Building, Statistics Canada, Ottawa, K1A 0T6, or call (613) 951-0178.

Highlights

Here are some key findings from the articles in this issue of Perspectives on Labour and Income.

Youth for Hire

- Despite a 10% drop in the youth population, the number of young workers in 1987 was the same as in 1977.
- From 1977 to 1987, the proportion of 15 to 19 year-olds in school full-time jumped from 66% to 76%. Among 20 to 24 year-olds, it rose from 15% to 20%.
- Three of every five part-time workers in accommodation, food and beverage services are students. In retail trade, nearly half of all part-timers are still in school.
- In 1987, the unemployment rate for out-of-school teenagers was 20%.

Canada's Unemployment Mosaic

- Among 40 specially-defined areas, 1985 unemployment rates ranged from 6.7% (in Toronto) to 24.0% (in Newfoundland outside the St. John's area). By 1988 the rates ranged from 3.7% to 19.2%.
- Areas of Canada with the lowest unemployment rates in 1985 have generally experienced the largest (relative) declines

since then. The result is a greater inequality in the distribution of unemployment across the country.

On Maternity Leave

- The number of maternity absences rose by almost 50% between 1980 and 1987.
- Even though Quebec has the lowest fertility rate, it has the highest rate of maternity absence of all the provinces.
- Between 1980 and 1987 the maternity absence rate for 30 to 34 year-old university graduates averaged 11.4%, three times the rate for all female paid workers of child-bearing age.
- Compared with other industry groups, maternity absences in public and regulated services are more common, of longer duration and more likely to be compensated.

The Changing Face of Temporary Help

- During 1986, about 81,000 Canadians were employed as paid workers in the temporary help industry. Three-quarters were women.
- The education level of temporary help workers tends to be above-average: in 1986 about four in ten temporary help workers

compared with three in ten paid workers across all industries had a postsecondary certificate or diploma, or a university degree.

■ Clerical workers still formed the majority of the temporary help industry's work force in 1986, but a growing proportion of workers are hired for managerial and professional positions (one in five employees in 1986).

Bilingualism and Earnings

■ In 1985, there were 2.0 million full-time year-round paid workers in Montreal, Toronto and Ottawa-Hull. About 48% spoke English at home, 10% French, and 2% spoke both official languages. A further 9% spoke neither English nor French at home.

■ The highest proportion of bilingual employees was found among the francophones in the Ottawa-Hull region, followed by the anglophones in Montreal.

■ After accounting for differences related to age, sex, education, occupation and industry, bilingual workers in Montreal and Ottawa-Hull earned somewhat more than unilingual workers. Differences were generally larger for women than for men.

Youth for Hire

Gary L. Cohen

For Canada's youth, the times are changing. Although fewer in number, today's young people are more likely to be in school than the youth of ten years ago. They are also more likely to be working.

The demand for youth labour is high and the prevalence of part-time, low-wage jobs, often associated with students, is increasing, particularly in the service sector. There are signs that employers, faced with a dwindling supply of young workers, are finding it increasingly difficult to fill these jobs. But, at the same time, unemployment rates remain relatively high among young persons, especially those out-of-school youths who may lack the knowledge or skills needed to get the jobs they want.

Major trends that have helped shape the youth labour market in the last decade – demographics, school attendance patterns and early labour force experiences – are the focus of this study.

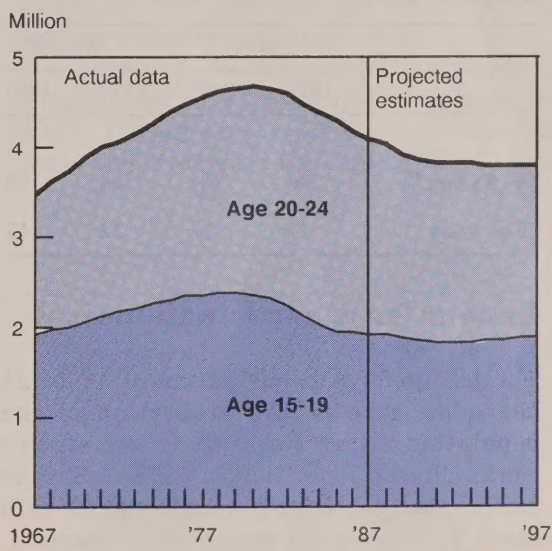
Fewer young people

There are now fewer young people in Canada than a decade ago. In 1987, 4.0 million persons aged 15 to 24 made up 20% of the working-age population.¹ In comparison, 4.5 million young persons accounted for 26% of the population in 1977.

Gary L. Cohen is with the Labour and Household Surveys Analysis Division. He can be reached at (613) 951-4623.

Youth Population Trends

The youth population dropped by 12% from 1980 to 1987 and a further decline of 8% is projected by 1997.



The youth population can be divided into two distinct groups: teenagers aged 15 to 19, and young adults aged 20 to 24. Population growth in these two groups was very different over the 1977-1987 decade: the number of teenagers declined 19% to 1.9 million, while the young adult population fell 1% to 2.1 million.

... but more of them in school

Despite a declining youth population, the absolute number of full-time students² increased 1% to 1.9 million over the decade. The student/population ratio – students as a percentage of the population – climbed from 66% to 76% for teenagers, and from 15% to 20% for young adults.

The number of non-students aged 15 to 24 dropped 18%, to 2.1 million, reflecting both the diminishing youth population and the rising incidence of school attendance. (See Table 5 for further information.)

Table 1
Student/Population Ratios,
1977 and 1987

	Men		Women	
	1977	1987	1977	1987
	%			
15-19 years	66	75	66	78
20-24 years	17	21	12	19

Labour force participation rises

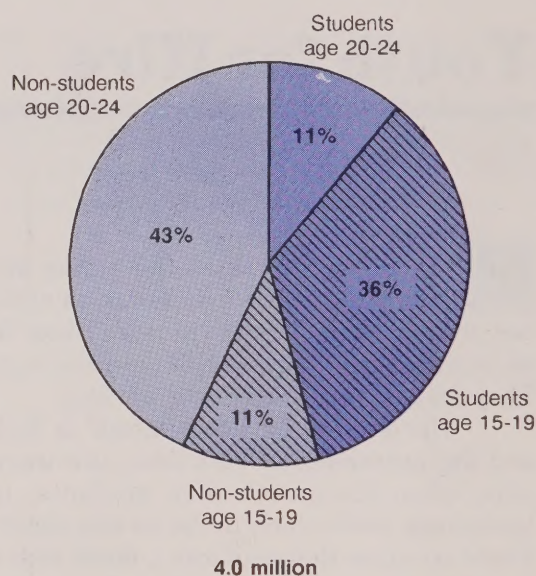
The labour force participation of 15 to 24 year-olds, that is, the proportion of the population either working or looking for work, climbed from 63% in 1977 to 69% in 1987. Youth participation increased for both sexes, but more so for women. In comparison, during this period the participation rate for persons aged 25 and over rose from 61% to 66%, as a large increase for women outweighed a decline among men.

The participation rate of students rose substantially, from 36% in 1977 to 48% in 1987, reflecting major gains for men and women in both age groups. Within the student population, there is little difference by age or sex in the rate of participation.

The overall participation rate among 15 to 24 year-old non-students increased

Youth Population Distribution, 1987

Nearly one-half of all youths were attending school full-time in 1987.



from 83% in 1977 to 87% in 1987. In other words, 13% of out-of-school youths were neither employed nor looking for work in 1987, down from 17% a decade earlier. Out-of-school females were less likely to be participants than males. Similarly, participation was lower for out-of-school teenagers than for young adults. In total, 268,000 young people were neither students nor labour force participants in 1987, down substantially from 451,000 in 1977.³ (See also Table 6.)

Today's youth more likely to work

An increasing proportion of young people are working. In 1987, 60% of 15 to 24 year-olds were employed, up from 54% in 1977. The employment ratio⁴ rose for both sexes,

although more so for young women. As a result, by 1987, the ratio was almost as high for young women as for young men (58% vs. 61%).

But, due to the declining youth population, the actual number of young workers in 1987, at 2.4 million, was the same as in 1977. (The number of young workers peaked at 2.7 million in 1981.) Thus, youth's share of total employment in Canada fell from 25% in 1977 to 20% in 1987.

The employment ratio increased much faster for students than for out-of-school youths during this period. The ratio for students climbed from 32% in 1977 to 43% in 1987, while for non-students it rose from 70% to 75%.

Part-time work predominates

Although total youth employment levels were the same in 1977 and 1987, a substantial shift from full-time to part-time

work took place. During this period, there was an increase of 256,000 young part-time workers (to 768,000), and a decline of 287,000 full-time workers (to 1.6 million).

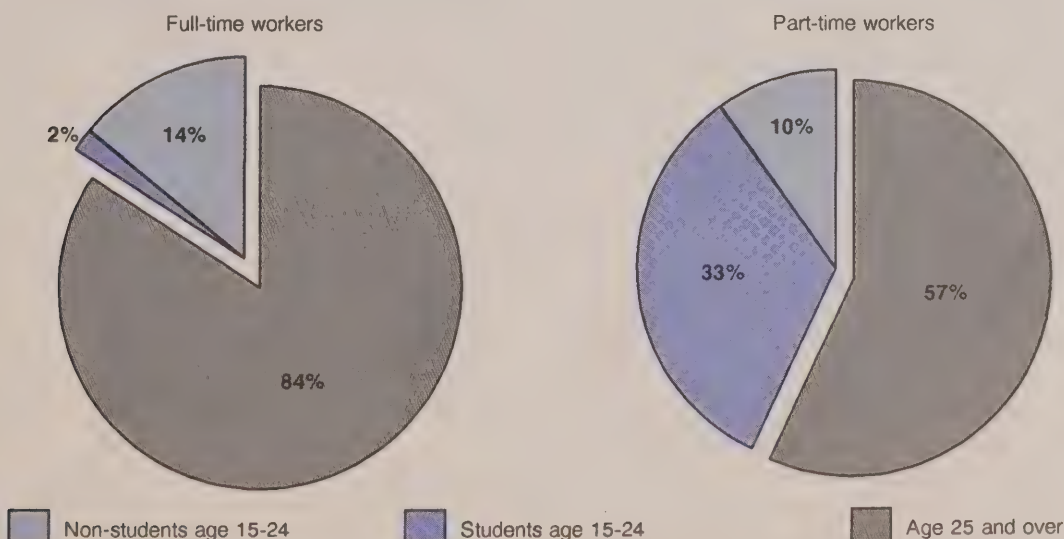
The proportion of young workers employed part-time, that is, usually working less than 30 hours per week, increased from 21% in 1977 to 32% in 1987. This trend reflects both the rising proportion of students, and growth in the part-time employment sector of the economy.⁵

The prevalence of "part-timers" among employed 15 to 24 year-olds rose for both sexes over this period, but, in 1987, was still higher for women (37%) than for men (28%). In comparison, among persons aged 25 and over, only one out of every 30 (3%) employed men and one out of five (22%) women worked part-time in 1987.

Among youths, part-time work is closely associated with school attendance. In 1987, 75% of employed students worked part-time, compared with only 11% of non-

Composition of Employment, 1987

A third of all part-time workers are students.



students. More than eight out of every ten students who worked part-time did so because of their school activities. In contrast, among out-of-school youths, 70% of those working part-time did so because they could not find full-time work.

Where they work

Young workers are most prevalent in retail trade; accommodation, food and beverage services; and "other services" – primarily amusement and recreational services, and personal and household services. (See Table 7.)

In 1987, 70% of all part-time workers aged 15 to 24 were engaged in these industries, compared with 38% of part-timers aged 25 and over. Young workers accounted for 71% of part-time workers in accommodation, food and beverage services, 58% of those in retail trade, and 46% of those in other services.

Among full-time workers, youths accounted for 33% of those in accommodation, food and beverage services, 26% in retail trade and 22% in other services. In absolute numbers, manufacturing employed more young full-time workers than any other industry (300,000), but young workers held only 15% of full-time manufacturing jobs.

Many young people are looking for work

Young persons are over-represented in the ranks of the unemployed: they account for a much larger percentage of the unemployed than the employed.⁶ Of almost 1.2 million unemployed persons in Canada in 1987, one-third were youths. And three out of every four unemployed youths were non-students.

The unemployment rate for 15 to 24 year-olds, that is, the unemployed as a percentage of the labour force, was 13.7% in 1987, compared with 7.5% for workers aged

25 and over. Among out-of-school teenagers, the unemployment rate was particularly high at 20.3%. Non-students aged 20 to 24 fared somewhat better with an unemployment rate of 13.4%. Student unemployment rates were lower than those of non-students, at 12.3% for teenagers and 8.4% for 20 to 24 year-olds.

The high unemployment rates experienced by out-of-school youths could reflect a mismatch between labour supply and demand. The available jobs may not satisfy their expectations in terms of launching a satisfactory career, or these jobs may require qualifications not possessed by those seeking employment.⁷

... but their job searches are brief

Although 15 to 24 year-olds experienced higher unemployment rates in 1987 than workers aged 25 and over, their average duration of unemployment was much shorter: 14 weeks, compared with 24 weeks.⁸ Among youths, students had an average duration of unemployment that was only about half as long as that for non-students.

Table 2
Duration of Unemployment, 1987

	15-24 years		
	Students	Non-students	25 years and over
	%		
Duration			
1-4 weeks	50	32	24
5-13 weeks	33	30	26
14-26 weeks	12	20	21
27-52 weeks	5	13	17
53 weeks or more	--	5	12
Total unemployed*	100	100	100
	weeks		
Average duration	8	16	24

* Excludes unemployed persons not seeking work because they have a new job to start in four weeks or less.

From another perspective, one-half of unemployed students and one-third of non-students had unemployment spells lasting only one to four weeks in 1987, whereas less than one-quarter of unemployed persons aged 25 and over had such brief unemployment durations.⁹

Shorter spells of youth unemployment may reflect several factors. For example, young persons are most active in industries characterized by a strong demand for workers and high turnover rates. In addition, some young people are returning students whose spell of unemployment ends when they return to school, while others may be inclined to enter the job market sporadically, especially if they still live with their parents.

... and regional patterns vary

Large regional disparities in unemployment rates are experienced by youths as well as adults. In 1987, the unemployment rate for 15 to 24 year-olds in Newfoundland was triple that of Ontario.

Table 3
Youth Unemployment Rates
by Province, 1987

	Unemployment rate
	%
Canada	13.7
Newfoundland	28.8
Prince Edward Island	--
Nova Scotia	19.4
New Brunswick	20.0
Quebec	14.8
Ontario	9.8
Manitoba	12.0
Saskatchewan	13.0
Alberta	15.3
British Columbia	18.5

Metropolitan areas

Young people in metropolitan areas¹⁰ are more active in the labour market than youths who live elsewhere. Both the participation rates and the employment ratios of 15 to 24 year-olds are higher in metropolitan areas, while their unemployment rates are lower. This phenomenon is particularly apparent in Toronto, where, in 1987, the employment ratio for youths was 69%, and the unemployment rate was 7%.

Table 4
Youth in Metropolitan and
Non-metropolitan Areas, 1987

	Partici- pation rate	Employ- ment ratio	Unem- ployment rate
	%		
Metropolitan areas	72	63	12.5
Non-metropolitan areas	65	55	15.6

Summer employment

For young persons, especially students, seasonal patterns of employment and unemployment are very evident. During July and August, the two peak summer months, their labour market characteristics are very different from those recorded during the "school year", that is, the remaining ten months of the year.

In the summer of 1987, the total number of employed 15 to 24 year-olds reached 2.8 million, up 21% from the average level recorded during the other months that year. Almost all of this increase originated among employed students: their numbers climbed 56% to 1.1 million.

The incidence of part-time work among employed students declines substantially in the summer. During the 1987 school year, 88% of employed students

worked part-time, compared with only 35% during July and August. In addition, almost three-fifths of those students who worked part-time during the summer did so because they were unable to find full-time work.

Summer employment gains for students in 1987 were widely distributed across industries. The largest absolute increases were in manufacturing, government services (particularly provincial and local governments), other services, construction, accommodation, food and beverage services, and agriculture.

Although the number of students employed in retail trade changed little throughout 1987, there was a considerable shift from part-time to full-time employment in the summer. During the school year, fewer than one out of every ten students in the retail trade industry worked full-time;

during the summer period, almost one-half did so.

Conclusion

Although youth participation rates and employment ratios have risen over the last decade, the share of Canada's labour supply accounted for by young people has diminished. The major reasons underlying this trend include a declining population, an increasing proportion attending school full-time, and a shift to part-time employment.

On average, today's youths are better educated and, because of their work experience, better prepared for the job market than their predecessors. But out-of-school youths with limited education may be having difficulty in finding stable, satisfactory employment. □

Table 5
Labour Force Estimates by Age, Sex, and Student Status,* 1987

	Popu- lation	Labour force			Not in the labour force
		Total	Employed	Unem- ployed	
'000					
Both sexes					
15 years and over	19,642	13,011	11,861	1,150	6,631
15-24 years	3,990	2,759	2,382	377	1,231
15-19: students	1,428	681	597	84	747
non-students	439	365	291	74	74
20-24: students	426	211	193	18	215
non-students	1,697	1,502	1,302	201	195
25 years and over	15,652	10,252	9,479	773	5,399
Men					
15 years and over	9,572	7,332	6,709	623	2,240
15-24 years	2,014	1,445	1,232	214	569
15-19: students	721	346	299	47	375
non-students	234	204	160	44	30
20-24: students	223	107	97	10	116
non-students	835	788	675	114	47
25 years and over	7,558	5,887	5,477	409	1,671
Women					
15 years and over	10,070	5,679	5,152	527	4,391
15-24 years	1,976	1,314	1,151	163	662
15-19: students	707	334	297	37	372
non-students	205	161	131	30	44
20-24: students	203	104	96	8	99
non-students	861	714	627	87	147
25 years and over	8,094	4,366	4,002	364	3,728

* See note 2.

Table 6
Selected Labour Market Rates by Age, Sex, and Student Status, 1977 and 1987

	Participation rate		Employment ratio		Unemployment rate	
	1977	1987	1977	1987	1977	1987
	%					
Both sexes						
15 years and over	62	66	57	60	8.1	8.8
15-24 years	63	69	54	60	14.4	13.7
15-19: students	35	48	31	42	11.3	12.3
non-students	82	83	63	66	22.6	20.3
20-24: students	40	49	37	45	8.3	8.4
non-students	83	89	73	77	12.5	13.4
25 years and over	61	66	57	61	5.8	7.5
Men						
15 years and over	78	77	72	70	7.3	8.5
15-24 years	69	72	59	61	14.9	14.8
15-19: students	37	48	33	42	11.6	13.5
non-students	88	87	67	69	23.5	21.4
20-24: students	39	48	36	44	9.3	9.0
non-students	95	94	82	81	12.9	14.4
25 years and over	81	78	77	72	4.9	7.0
Women						
15 years and over	46	56	42	51	9.4	9.3
15-24 years	58	66	50	58	13.8	12.4
15-19: students	32	47	29	42	10.9	11.1
non-students	75	79	59	64	21.5	18.8
20-24: students	42	51	39	47	7.1	7.8
non-students	73	83	64	73	12.1	12.2
25 years and over	42	54	39	49	7.4	8.3

Table 7
Youth Employment in Selected Industries, 1987

	Young workers					
	Full-time		Part-time		Total	
	Number	As % of all full-time workers	Number	As % of all part-time workers	Students	Non-students
	'000	%	'000	%	'000	
All industries	1,614	16	768	43	790	1,593
Agriculture	55	14	30	41	39	46
Manufacturing	300	15	31	43	48	283
Construction	119	19	11	25	19	111
Retail trade	280	26	263	58	244	300
Government services	67	9	19	36	31	55
Accommodation, food and beverage services	154	33	164	71	161	157
Other services	125	22	113	46	109	129
All other industries	514	12	136	22	139	511

Notes

¹ The working-age population consists of all persons in the population 15 years of age and over residing in Canada, with the exception of the following: residents of the Yukon and the Northwest Territories, persons living on Indian reserves, inmates of institutions and full-time members of the Armed Forces.

² The Labour Force Survey (LFS) identifies persons aged 15 to 64 who are currently attending school full-time and, for the months of May through September, 15 to 24 year-olds who are not currently attending school, but who attended full-time the previous March and plan to return to school in the fall. In this article, student and non-student estimates relate solely to persons aged 15 to 24.

³ In 1987, 74,000 teenagers and 195,000 young adults were out of school and out of the labour force. Some 37% of the teenagers had never worked, while 28% had lost or been laid off from their last job. Among young adults, 17% had never worked, 33% had lost or been laid off from their last job, and 21% had left their last job due to personal or family responsibilities.

⁴ The employment ratio, also known as the employment/population ratio, measures the number of employed persons as a percentage of the population.

⁵ Only about one-half of the rise in the proportion of employed youths working part-time reflects the increased incidence of part-time employment; the other half is accounted for by the increase in the proportion of young persons who are students.

⁶ In the LFS, students currently attending school full-time are considered to be unavailable for full-time

work. To be counted as unemployed they must be seeking part-time work. Full-time students seeking full-time work are assumed to be looking for a job to start at a future date, for example, summer or post-graduation employment; as such, they are considered to be out of the labour force while at school. During vacation periods, however, students seeking full-time employment are counted as unemployed if they are available for work.

⁷ On average, unemployed out-of-school youths have less education than their employed counterparts. In 1987, 7% of those unemployed had only a primary level education (grade 8 or less), while 22% had at least some post-secondary schooling. In contrast, only 3% of employed non-students had just a primary level education, while 37% had some post-secondary schooling or more.

⁸ The duration of unemployment measures the length of unemployment spells currently in progress, up to the time of the survey. Completed spells of unemployment are not measured.

⁹ The brevity of spells of youth unemployment tends to moderate their rate of unemployment. If their distribution by duration of unemployment in 1987 had matched that of workers aged 25 and over, the youth unemployment rate that year would have exceeded 20%, all other things being equal.

¹⁰ A metropolitan area, or more precisely a census metropolitan area (CMA), is an urbanized core with a population of at least 100,000 together with its main labour market area. The LFS recognizes the 25 CMAs used in the 1986 Census of Canada.

Chart references

Youth Population Trends: Demography Division (includes all persons aged 15-24 in Canada).

Youth Population Distribution 1987: Labour Force Survey.

Composition of Employment, 1987: Labour Force Survey.

For more information

An extensive data set, prepared for this study, can be obtained on request. It includes 1977 and 1987 LFS estimates for Canada and the provinces based on the student definition used in this article. It also has data on full-time and part-time

employment by industry.

The data set can be obtained either on paper or IBM-compatible computer diskette at a cost of \$50. The diskette is available in either Lotus 1-2-3 or ASCII format. Requests should be addressed to the author.

Canada's Unemployment Mosaic

Dave Gower

By the middle of the 1980s, the Canadian economy had by and large recovered from the 1981-1982 recession and was growing vigorously. Since then, the national unemployment rate has dropped to a level not seen since the beginning of the decade.

These trends have fuelled concerns about labour shortages. The Economic Council of Canada (1987) warned that "... it will be necessary to keep a watchful eye on the situation ..." (p.17). The proliferation of "help-wanted" signs in some areas, for example Toronto, has reinforced fears of labour shortages and a resulting rise in wage-driven inflation.

Some observers of the labour market wonder whether Canada might be approaching the "full-employment rate of unemployment", that is, the lowest level of national unemployment that can be sustained without incurring significant pressures of wage inflation. In its annual review for 1987, the Economic Council proposed 6% to 8% as a likely range for the full-employment unemployment rate, and suggested this as a goal for the early 1990s. A Bank of Canada study concluded that 8% was about the lowest unemployment rate consistent with a stable rate of inflation at

the end of 1987 (Rose, 1988). In fact, the annual average rate dropped below 8% in 1988.

Despite this drop, many areas continue to experience high unemployment rates. Thus, the national average conceals a variety of local situations. This study examines the geographic pattern of unemployment from 1985 to 1988.

With the help of labour market data for 40 areas, the following key questions are addressed:

- As the economy continued to grow strongly during the late 1980s, did unemployment become more evenly distributed or less? Which areas gained and which fell behind?
- Have low unemployment areas reached a "floor", a levelling out of their unemployment rates?
- How are population shifts and different patterns of employment growth reflected in the unemployment data of the 40 areas?

The selected areas

The objectives of this study required that subprovincial areas be delineated. In selecting the number of areas and in drawing boundaries, trade-offs had to be made. The greater the number of regions, the more precise the measure of variations in Canadian labour market conditions. However, a large number of areas implies

Dave Gower is with the Labour and Household Surveys Analysis Division. He can be reached at (613) 951-4616.

Unemployment concepts

In simple classical models, unemployment was the result of an inappropriate level of wages. In a market for any type of good, there was presumed to be a price level at which the quantity supplied equalled the quantity demanded. If this price was too high, then supply exceeded demand. In the case of labour markets, the price was expressed as a wage and the excess supply showed up as unemployment.

The real world (and modern theory) is much more complex. Unemployment can exist even when the demand for labour is fully adequate to absorb the available supply. Some people become unemployed due to job dissatisfaction, others from dismissal or layoffs resulting from business reorganization.

Furthermore, there is a steady flow of entrants and re-entrants to the labour market. Regardless of the reason behind their job search, for many of these people the process can take time even in the best conditions. This is sometimes referred to as "frictional unemployment".

small labour force estimates, with correspondingly higher sampling errors: that is, less reliable data.

This study uses annual average data from the Labour Force Survey (LFS) for 24 census metropolitan areas (CMAs).¹ These are reasonable starting points because their boundaries are defined using commuting patterns and they are, therefore, among the most homogeneous labour markets in the country.

In most provinces, the area outside the CMAs was treated as if it were a single labour market. In the two largest provinces, Ontario and Quebec, the population outside the CMAs was large enough to permit

Another reason for unemployment is a mismatch of available persons and jobs. These mismatches can exist for numerous reasons. For example, employers may be seeking types of skills or training different from those possessed by unemployed persons, or the jobs and potential workers may be in different locations. Unemployment resulting from such mismatches is commonly referred to as "structural unemployment".

Frictional and structural unemployment essentially dictate that unemployment cannot become zero. Instead, as unemployment declines, "real life" labour shortages develop while there is still unemployment. This means that pressures of wage inflation begin to occur well above a level of zero unemployment.

In Canada, particularly since 1985, considerable public attention has been focused on one particular type of structural unemployment – that due to a geographical mismatch of persons and jobs. This paper is not intended to present a full analysis of structural factors in Canadian unemployment, but rather to highlight this one aspect.

further breakdowns, using LFS economic regions. In total, 40 areas were identified.

The 40 areas: an overall picture

The 40 areas were ranked according to their 1988 annual average unemployment rate, from lowest to highest (Table 1).

In all the years studied, the wide range of unemployment rates is striking: in 1988, for example, the rates varied from 3.7% in Toronto to 19.2% in non-metropolitan Newfoundland. There was also a wide gap between non-metropolitan Newfoundland and the area with the next-highest unemployment rate (usually Lower St. Lawrence).

Labour market defined

In its broadest sense, a market can be defined as "... an area within which buyers and sellers are in sufficiently close communication that price tends to be the same throughout the area" (Reynolds, 1982). The extent of a market for labour, however, depends partly on the type of worker involved. For example, the market for university teachers or senior business executives is national or even international, whereas store clerks and truck drivers are seldom recruited from outside their local area.

A key concept used to define local labour markets is daily commuting distance. This concept works well in metropolitan areas. It is, for example, unlikely that a very tight labour market

could exist in one half of Calgary without the other half being affected, since an imbalance could be easily corrected if even a small proportion of the population commuted from one side of the city to the other.

At the other extreme, in an area such as Northern Ontario, sheer physical size prevents this adjustment process from operating, and means that local conditions can vary widely from place to place at any one time.

In between are areas such as Southern Ontario, which are larger and more diverse than individual metropolitan areas, but still sufficiently compact to allow internal market equalization mechanisms to operate to a limited extent.

Another notable pattern is that the tightest labour markets are increasingly concentrated in Ontario. Looking at the areas ranked 1 to 10 (that is, those with the lowest unemployment rates) in 1985, five of the ten areas were in Ontario and a sixth (Ottawa-Hull) straddles the Ontario border. By 1988 all ten labour markets with the lowest unemployment rates were either in or bordering Ontario.

Measuring the distribution of unemployment

The statistic used in this study to measure inequality is called the Gini coefficient (see note at end of article). If all 40 areas had the same unemployment rate, the value of this coefficient would be zero. Alternatively, if the nation's unemployed were concentrated in only a few of the 40 areas, the value of the coefficient would approach one. In other words, the higher the Gini coefficient, the less equally distributed is unemployment.

The value of the Gini coefficient started at .165 in 1985, rose to .178 in 1986, .190 in 1987 and finally to .202 in 1988. This indicates that unemployment became less evenly distributed as the economy improved during the mid to late 1980s.

This increasing inequality is also illustrated by the total range of unemployment rates across Canada. Comparing Toronto with non-metropolitan Newfoundland, the ratio of the highest to lowest rates increased from 3.6:1 in 1985 to 5.2:1 in 1988. Alternatively, comparing Toronto with the area with the second highest rate (Lower St. Lawrence in both 1985 and 1988), the range still showed a strong rise: from 2.6:1 in 1985 to 3.7:1 in 1988.

Comparison of changes in unemployment

Behind this general pattern, there were more detailed variations. To examine these, the 40 areas were ranked and clustered

Table 1
Unemployment Rates in 40 Areas, 1985 to 1988

Areas ordered by 1988 unemployment rate	Unemployment rate				Rank			
	'85	'86	'87	'88	'85	'86	'87	'88
	%							
Toronto CMA	6.7	5.5	4.5	3.7	1	1	1	1
London CMA	8.8	7.1	7.1	4.4	12	8	9	2
Central Ontario excl. CMAs	7.2	6.7	5.3	4.7	4	6	2	3
Ottawa-Hull CMA	8.3	8.4	7.3	5.0	7	12	10	4
Kitchener-Waterloo CMA	7.2	5.9	5.8	5.1	3	2	3	5
Oshawa CMA	7.2	6.1	6.4	5.2	5	3	6	6
Hamilton CMA	8.8	6.9	6.3	5.7	13	7	4	7
Thunder Bay CMA	10.7	10.4	8.2	6.1	21	21	14	8
Southern Ontario excl. CMAs	10.1	8.2	7.4	6.2	19	11	11	9
St. Catharines-Niagara CMA	10.7	9.8	9.3	6.4	22	19	20	10
Saskatchewan excl. CMAs	7.1	6.6	6.7	6.9	2	5	7	11
Alberta excl. CMAs	8.3	8.5	8.8	7.0	8	14	17	12
Manitoba excl. Winnipeg	7.3	6.5	6.4	7.0	6	4	5	13
Regina CMA	9.6	8.1	6.9	7.1	15	10	8	14
E. Ont/S.W. Que. excl. CMA	9.8	8.6	7.7	7.3	17	15	12	15
Northern Ontario excl. CMAs	9.7	11.1	9.6	7.7	16	25	22	16
Halifax CMA	9.5	9.8	8.9	7.8	14	17	18	17
Windsor CMA	8.4	8.1	9.3	7.9	9	9	21	18
Calgary CMA	10.2	9.8	9.0	8.1	20	18	19	19
Winnipeg*	8.8	8.5	8.0	8.3	11	13	13	20
Quebec CMA	8.6	8.8	8.8	8.4	10	16	16	21
Central Quebec excl. CMAs	11.6	10.2	10.3	8.8	23	20	25	22
Abitibi - Northern Quebec	13.7	12.1	8.8	9.2	32	30	15	23
Edmonton CMA	12.0	11.6	11.3	9.2	25	28	28	24
Montreal CMA	11.7	10.6	10.0	9.3	24	22	24	25
Vancouver CMA	13.2	10.7	11.4	9.4	29	24	29	26
Sudbury CMA	13.5	11.4	11.5	9.8	31	27	30	27
Saskatoon CMA	10.0	10.6	9.9	9.9	18	23	23	28
Victoria CMA	13.0	12.1	10.9	10.2	27	29	26	29
Trois-Rivières CMA	12.9	12.7	11.0	10.4	26	31	27	30
Saint John CMA	15.4	13.6	12.6	10.9	35	34	33	31
Chicoutimi CMA	13.2	11.4	11.7	11.0	28	26	31	32
St. John's CMA	14.8	13.1	12.5	11.3	33	32	32	33
British Columbia excl. CMAs	15.5	14.9	12.8	11.6	37	36	34	34
Nova Scotia excl. Halifax	16.2	15.3	14.6	11.8	38	38	39	35
New Brunswick excl. Saint John	15.1	14.5	13.2	12.3	34	35	36	36
Prince Edward Island	13.3	13.4	13.2	13.0	30	33	35	37
St-Jean - Côte Nord excl. CMA	15.4	15.1	14.4	13.1	36	37	38	38
Lower St. Lawrence	17.7	18.8	13.7	13.8	39	39	37	39
Newfoundland excl. St. John's	24.0	22.4	20.8	19.2	40	40	40	40
CMA total	9.8	8.7	8.2	7.1				
Non-CMA total	11.5	10.8	9.9	8.8				
Canada	10.5	9.5	8.8	7.8				

* Data for Winnipeg refer to LFS economic region 670.

Table 2
Average Unemployment Rates, Quartiles of Areas

Quartile*	Rate				Index			
	'85	'86	'87	'88	'85	'86	'87	'88
	%				1988 = 100			
1	7.7	6.6	5.7	4.6	168	144	124	100
2	8.9	8.6	8.2	7.5	118	115	109	100
3	11.8	10.6	10.4	9.2	129	115	113	100
4	16.2	15.6	13.9	12.6	129	123	110	100
Canada total	10.5	9.5	8.8	7.8	135	123	114	100

* See Table 1 for the composition of each quartile.

into quartiles (that is, four groups of ten areas each) based on their 1988 annual average unemployment rates.

Looking only at the absolute percentage point change, the first quartile shows less movement over the years than the fourth quartile. For example, between 1985 and 1988 the unemployment rate dropped 3.1 points for quartile 1 (from 7.7% to 4.6%), compared with 3.6 points for quartile 4 (16.2% to 12.6%). However, on a proportional basis, the drop in unemployment in quartile 1 was more than double the decline in quartile 4. This is reflected in the 1985 index values (168 vs. 129), as shown in Table 2.

This approach does not directly answer a key question: What happened to areas which already had tight labour markets? Did they continue to get tighter, or did they experience moderation? To investigate this, a subset of quartile 1, consisting of seven areas in the top ten in 1987 as well as 1988, was selected to obtain a "hard core" of the tightest labour markets in the final two of the four years. The behaviour of this subset between 1987 and 1988 allows us to check for evidence of moderating trends.

Between 1987 and 1988, the unemployment rate for these seven areas (which are all in Ontario or on its borders) dropped

more quickly than those for the rest of the country. Their average 1987 index value was 123, compared with a range of 109 to 113 for areas in quartiles 2, 3 and 4. Therefore, there is no evidence that labour market tightness has a moderating effect – quite the opposite.

Table 3
Unemployment Rates, Seven Areas
in Quartile 1

	'85	'86	'87	'88
	%			
Unemployment	7.3	6.3	5.3	4.3
	1988 = 100			
Index	169	145	123	100

Changes in rank

Another dimension of the changing mosaic of unemployment is the relative order of the 40 areas. Despite the widening distribution, the overall ranking of areas by their unemployment rate changed little over the four years. In fact, 27 of the 40 regions changed rank by four places or less between 1985 and 1988.²

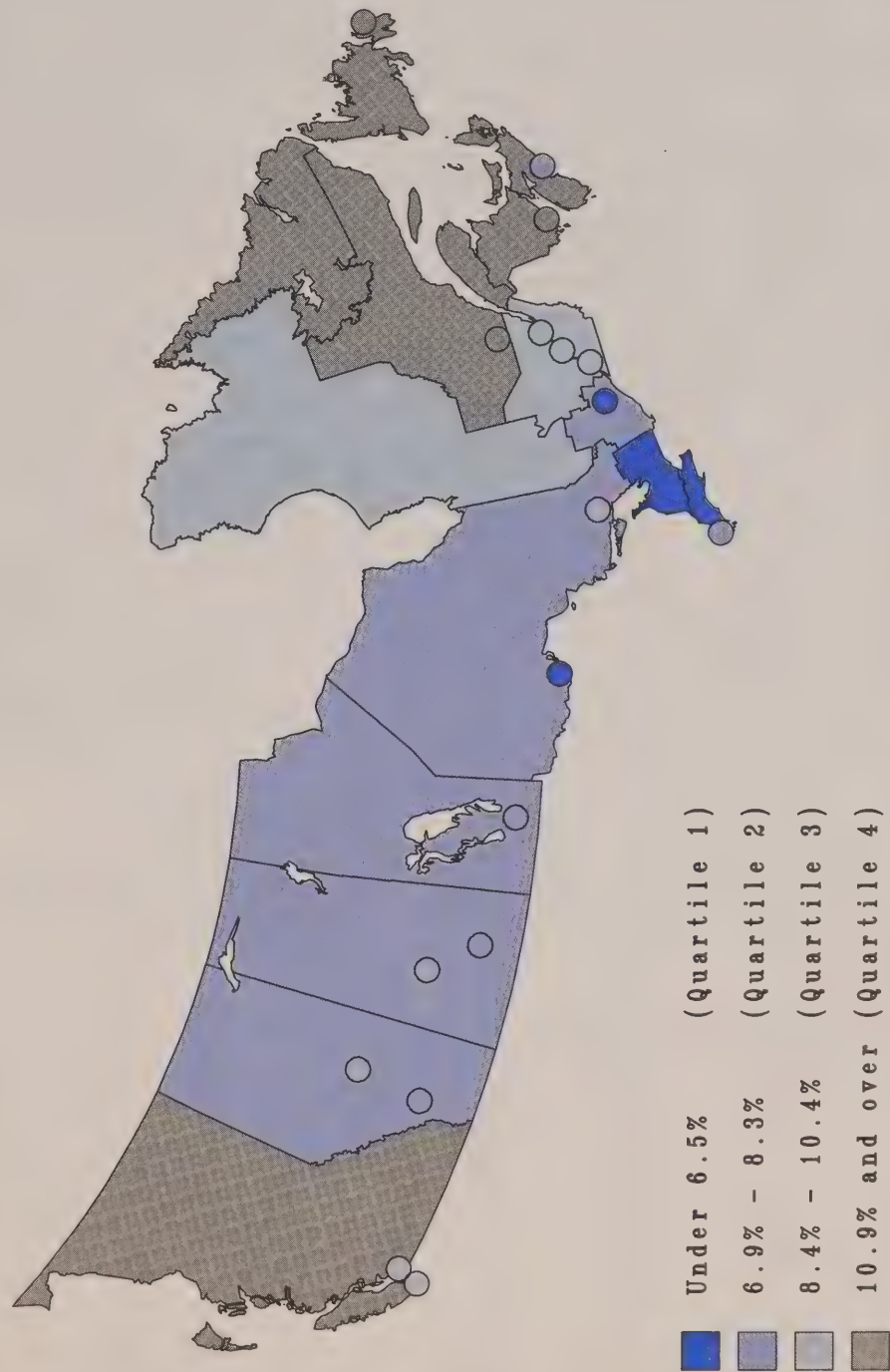


There were however some exceptions to this pattern of stability. Some areas improved their relative positions between 1985 and 1988, most notably Thunder Bay (by 13 places), St. Catharines-Niagara (12 places), non-metropolitan Southern Ontario and London CMA (10 places), and Abitibi - Northern Quebec (9 positions). Other areas suffered losses in rank, most noticeably

Quebec CMA (11 positions). Other areas which slipped were: Saskatoon (10 places), and non-metropolitan Saskatchewan, Windsor and Winnipeg (nine places each).

Smaller rank shifts also occurred, but these may not be meaningful since rank can be affected by small differences in the unemployment rate (often below the level of sampling reliability).³

1988 Unemployment Rate, 40 Areas



Employment changes and population factors

The supply of labour is affected by both the size of the working-age population and the proportion of this group in the labour force (the participation rate). The demand for labour is primarily reflected in employment levels. In terms of the impact on unemployment, a variety of outcomes is possible from the interaction of these factors; for example, if employment grows, but more slowly than the supply of labour, both employment and unemployment will increase.

To obtain a better understanding of labour supply and demand shifts underlying changes in the unemployment rate, this section addresses changes in employment and population for the four groups of areas.

Not surprisingly, low-unemployment areas in 1988 generally experienced faster employment growth than the country as a whole. Comparing quartile 1 with the Canada total, the difference in employment change was over 0.5 percentage points in each year. An increase in labour demand may not always be the driving force behind a drop in unemployment, but it certainly appears to be the case here.

However, above-average employment growth was not entirely concentrated in

tight labour markets. Between 1987 and 1988, employment growth in the fourth quartile (the ten areas with the highest unemployment) exceeded that of the first quartile. A number of developments may have contributed to the above-average employment growth in the quartile 4 areas; a variety of growth patterns are evident within the quartile (see Table 5).

Population growth was much higher in quartile 1 areas than elsewhere, suggesting that population flows were responding to economic opportunities.

What impact would population inflow have on an area's unemployment rate? By increasing the supply of labour, it should raise unemployment, thus moderating the difference between quartile 1 and the rest of the country, particularly if the skills and training possessed by new arrivals are not appropriate for the vacant jobs. However, other factors are also at work here, one of which might be that population inflow itself generates jobs by increasing local demand for housing and other goods and services.

Summary

Although most areas of the nation benefited from the general decline in unemployment

Table 4
Growth in Employment and Working-age Population

	Year-to-year percentage change					
	Employment			Population		
	'85-'86	'86-'87	'87-'88	'85-'86	'86-'87	'87-'88
Quartile						
1	3.7	3.9	3.8	1.9	2.1	1.9
2	1.4	1.2	2.4	0.7	0.7	0.7
3	3.1	2.8	2.8	1.1	1.2	1.2
4	1.6	3.1	4.2	0.1	0.5	0.7
Canada total	2.8	2.9	3.2	1.1	1.3	1.3

rates from 1985 to 1988, regional inequality in the distribution of unemployment worsened. Areas of the country with the tightest labour markets continued to expand

quickly in 1988, with employment and population growth above the Canadian average. □

Table 5
Growth in Employment and Working-age Population in 40 Areas, 1985 to 1988

Areas ordered by 1988 unemployment rate	Year-to-year percentage change					
	Employment			Population		
	'85-'86	'86-'87	'87-'88	'85-'86	'86-'87	'87-'88
Toronto CMA	4.1	3.9	2.4	2.5	2.3	2.1
London CMA	6.3	2.1	3.7	1.8	1.4	1.1
Central Ontario excl. CMAs	2.2	4.7	5.2	0.9	1.8	1.8
Ottawa-Hull CMA	2.8	4.6	6.5	2.2	2.3	2.1
Kitchener-Waterloo CMA	3.0	1.6	6.2	2.6	1.9	1.7
Oshawa CMA	6.1	4.1	3.9	3.3	3.4	3.2
Hamilton CMA	6.9	6.6	3.0	1.4	2.0	1.9
Thunder Bay CMA	0.6	4.6	1.7	1.1	1.7	1.5
Southern Ontario excl. CMAs	4.6	0.5	5.2	0.6	2.0	2.0
St. Catharines-Niagara CMA	-2.4	5.4	4.2	0.2	0.9	0.8
Saskatchewan excl. CMAs	0.1	-0.7	-0.7	-0.7	-0.4	-1.1
Alberta excl. CMAs	0.8	-0.7	4.2	0.7	0.1	0.4
Manitoba excl. Winnipeg	2.8	1.5	0.2	0.4	1.1	0.8
Regina CMA	3.9	2.8	-0.8	1.6	1.8	1.1
E. Ont/S.W. Que. excl. CMA	2.8	5.7	3.4	0.4	1.5	1.5
Northern Ontario excl. CMAs	-5.5	-0.7	4.2	-0.6	0.2	0.1
Halifax CMA	3.5	3.2	3.3	2.1	2.2	2.2
Windsor CMA	3.6	3.7	6.6	1.5	1.3	1.1
Calgary CMA	3.6	0.0	2.8	1.8	0.9	1.8
Winnipeg*	1.9	1.1	0.3	1.0	0.6	0.3
Quebec CMA	1.4	-1.7	0.5	1.7	0.7	0.4
Central Quebec excl. CMAs	2.8	4.4	5.0	0.0	1.1	1.1
Abitibi - Northern Quebec	6.6	1.1	7.1	-0.1	0.3	0.2
Edmonton CMA	0.8	2.4	3.3	1.0	0.6	1.1
Montreal CMA	2.1	3.7	1.4	1.1	1.0	0.8
Vancouver CMA	7.7	0.8	4.1	2.1	2.4	2.9
Sudbury CMA	5.5	1.1	0.5	-0.1	-0.9	-1.2
Saskatoon CMA	2.5	1.4	0.5	2.7	1.4	0.6
Victoria CMA	-2.3	10.9	0.1	1.7	2.1	2.7
Trois-Rivières CMA	2.5	4.0	6.0	1.3	1.2	1.0
Saint John CMA	3.7	1.4	9.0	1.2	1.4	1.3
Chicoutimi CMA	5.5	-2.3	3.6	0.4	1.2	1.1
St. John's CMA	2.7	0.9	5.9	1.4	0.9	0.9
British Columbia excl. CMAs	0.9	3.9	4.7	-0.3	0.3	1.0
Nova Scotia excl. Halifax	1.6	2.4	5.5	0.2	0.2	0.0
New Brunswick excl. Saint John	2.7	4.0	1.9	0.6	0.6	0.7
Prince Edward Island	1.6	2.4	3.2	0.8	0.8	1.1
St-Jean - Côte Nord excl. CMA	1.8	2.6	2.1	-1.1	0.2	0.2
Lower St. Lawrence	-2.2	4.3	3.0	-0.4	0.1	0.0
Newfoundland excl. St. John's	2.7	3.2	5.3	0.1	0.9	0.9
CMA total	3.5	3.0	2.8	1.7	1.6	1.6
Non-CMA total	1.7	2.7	4.0	0.2	0.8	0.8
Canada	2.8	2.9	3.2	1.1	1.3	1.3

* Data for Winnipeg refer to LFS economic region 670.

The Gini coefficient: estimating inequality in the distribution of unemployment

The Gini coefficient is commonly used to measure inequality in the distribution of income. (See Morgan et al., 1962, pp. 310-311.)

In this study, the Gini coefficient was used as a global measure of inequality in the distribution of unemployment among 40 areas. This measure rose steadily during the study period, from .165 in 1985 to .202 in 1988, indicating that unemployment became less evenly distributed during the period.

The Gini coefficient is sensitive to the choice of units. If another set of areas were used – for example, provinces – different values would result.

The calculation procedures normally used for income calculations were adapted to the needs of the data set in this study. Within any given year:

- The 40 areas were ranked by their unemployment rate, from lowest to highest.
- A cumulative count of the labour force was made over the areas.
- The same was done for unemployment.
- The cumulative counts in steps (b) and (c) were converted to cumulative proportions.
- In each of the 40 areas the value resulting from step (d) for unemployment was subtracted from the same value for the labour force. Because discrete areas were used in this study rather than a continuous distribution, this difference was calculated according to the following formula:

$$D_r = \frac{C_{lr} + C_{lr-1}}{2} - \frac{C_{ur} + C_{ur-1}}{2}, \text{ where}$$

r refers to the r^{th} area, after ordering according to unemployment rates;

D_r refers to the difference between the cumulative labour force and unemployment proportions;

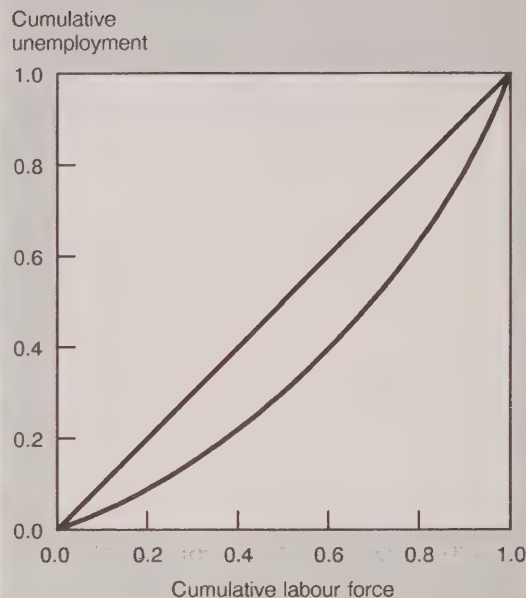
C_{lr} and C_{lr-1} are the cumulative labour force proportions over, respectively, the first r and first $r-1$ (when $r=1$, the value for $r-1$ is set to 0); and

C_{ur} and C_{ur-1} are the corresponding values for cumulative unemployment.

- These differences were summed over the 40 areas to calculate the size of the crescent-shaped area under the curve. However, to allow for the fact that the areas are not all the same size, the differences were weighted by the labour force in each area. The sum can therefore be expressed as:

$S = \text{the sum over the 40 areas of } (F_r \times D_r),$
where F_r is the proportion of labour force in the area.

- Finally, the Gini coefficient is calculated by dividing S by .5 (the area under the diagonal) as illustrated below:



The line representing the cumulative proportional distribution of unemployment is called the Lorenz curve. In this schematic representation, if all areas had the same unemployment rate, the Lorenz curve would be a straight line at 45° from the axes. In fact, because the areas are ordered from the lowest to the highest unemployment rate, the Lorenz curve lies below this straight line. The cumulative proportion of unemployment will initially grow more slowly than the cumulative proportion of the labour force, catching up as higher-unemployment areas are added into the calculation. Note that cumulative frequencies for both the labour force and unemployment sum to one.

The Gini coefficient is calculated by dividing the size of the crescent-shaped zone between the curve and the 45° line by the area of the triangle under the 45° line.

Literature on income inequality states that an increase in the Gini coefficient can be interpreted unambiguously as an increase in inequality only if the Lorenz curves do not intersect (Atkinson, 1983). There is no overlap between the Lorenz curves for the 1985 and 1988 data.

Notes

¹ The Labour Force Survey (LFS) provides labour market data on the working-age population (aged 15 and over) excluding residents of the Yukon and Northwest Territories, Indian reserves and institutions, as well as full-time members of the Armed Forces.

² A Spearman rank-order correlation of the unemployment rates in 1985 and 1988 yielded a coefficient of .87.

³ The same consideration dictates caution in comparing minor differences in rank between areas at any given point in time. Unrounded numbers were used to separate apparently equal rates.

References

Atkinson, A.B. *The Economics of Inequality*. Second edition, Clarendon Press, Oxford, 1983.

Economic Council of Canada. *Reaching Outward*. Twenty-fourth Annual Review, Ottawa, 1987.

Morgan, J., M. David, W. Cohen and H. Brazer. *Income and Welfare in the United States*. McGraw-Hill, New York, 1962.

Reynolds, L.G. *Labor Economics and Labor Relations*. Prentice-Hall, Englewood Cliffs, N.J., 1982.

Rose, D.E. *The NAIRU in Canada: Concepts, Determinants and Estimates*. Technical Report No. 50, Bank of Canada, Ottawa, 1988.

On Maternity Leave

Joanne Moloney

The last thirty years have witnessed dramatic changes in fertility and in labour force participation among women in Canada. Since the late 1950s the fertility rate has been halved and the participation rate for women has doubled. These trends have heightened interest in the availability and use of maternity leave and benefits.

In the context of the labour market, maternity absences have both costs and benefits. The costs are mainly incurred in the short term. Some are borne by women who take maternity leave – a loss of income and job experience, and possibly forgone opportunities for job advancement. Some of the costs are shouldered by employers through their support of financial compensation schemes. The lost output of an employee on maternity leave (or the alternative of securing a temporary replacement) is also a cost. Finally, there are costs to society, for example, the public share of the total cost of maternity compensation plans.

The benefits of maternity absences in a labour market context are longer term and relate to the supply of labour twenty or thirty years from now. To a large extent, this supply depends on the child-bearing decisions of today's working women.

Prospective parents do not look only at the short-term costs surrounding the

birth of a child. They weigh intangibles, such as the satisfaction derived from a loving parent-child relationship. They also weigh the long-term costs of child-rearing. This study of maternity leave entitlements and absences thus looks at only one facet of a very complex process. It examines the incidence of maternity absences in the 1980s in relation to fertility rates, revealing distinct patterns by age, education and province. The analysis also addresses the link between compensation and duration of maternity absences.

Incidence of maternity absences

Although maternity leave has been prominent among the employment issues of the 1980s, most of the attention has focused on comparisons of the quality of maternity leave provisions and benefits "packages", rather than on the incidence of pregnancy among working women. A scarcity of relevant data may partly explain this.

The annual Absence from Work Survey (AWS) collects information on absences of two weeks or longer due to accident, illness or pregnancy, among persons who were paid workers at some time during the reference year.¹

This article uses the AWS definition for the incidence rate of absence from work due to pregnancy, that is, the proportion of the female paid worker "pool" who **began** a pregnancy-related absence during the year.

Joanne Moloney is with the Labour and Household Surveys Analysis Division. She can be reached at (613) 951-4626.

The pool consists of women of child-bearing age who were paid workers at some time during the year.

Trends in the 1980s

Given the persistent upward trend in the labour force participation of women, it is not surprising that the number of paid workers absent due to pregnancy has also grown. Between 1980 and 1987, pregnancy-related

Between 1980 and 1987, pregnancy-related absences increased by almost 50%.

absences increased by almost 50%, from 134,000 to 199,000. Except for a slight stall in 1982, which was presumably related to falling employment levels during the recession, the increase was spread evenly

Survey data sources for maternity absence

The Absence from Work Survey

The Absence from Work Survey (AWS), sponsored by Employment and Immigration Canada, is conducted every February as a supplement to the monthly Labour Force Survey (LFS). Its target population consists of persons aged 15 and over who worked as paid employees at some time during the previous year and who were absent from work for two or more consecutive weeks in that year as the result of an illness, accident or pregnancy. **Only absences which began during the reference year are included in the survey.**

In the case of multiple absences for a given worker, the AWS records details on the most recent absence and a small amount of information on the previous one. The questions asked include the reason for the absence, its duration and the types of compensation received.

The Maternity Leave Survey

To obtain more specific information on how the work patterns of pregnant women are affected, the Maternity Leave Survey (MLS), also sponsored by Employment and Immigration Canada, was conducted in February 1985 with

the AWS. The sample consisted of respondents from the AWS who had been absent for pregnancy during the reference year (1984).

The questions asked in the MLS include the following: the respondent's type of work (full-time/part-time) in the 52 weeks preceding the absence; how many weeks before the birth (and why) the woman stopped working; how many weeks after the birth the mother returned to work (if she had returned – otherwise, why she had not); and how many weeks before and after the birth Unemployment Insurance (UI) benefits were received.

Sampling variability

The estimates from these surveys are subject to some degree of sampling error. The AWS is normally conducted using half of the households in the LFS sample of 48,000. The sampling ratio (that is, the proportion of the target population actually sampled) is much higher in some provinces than in others. As a result, the sampling variability associated with an estimate of a given size will not be the same for all provinces. For a given province the coefficient of variation (CV) generally decreases as the size of the estimate increases. (For further information see Lévesque (1988) or contact the author.)

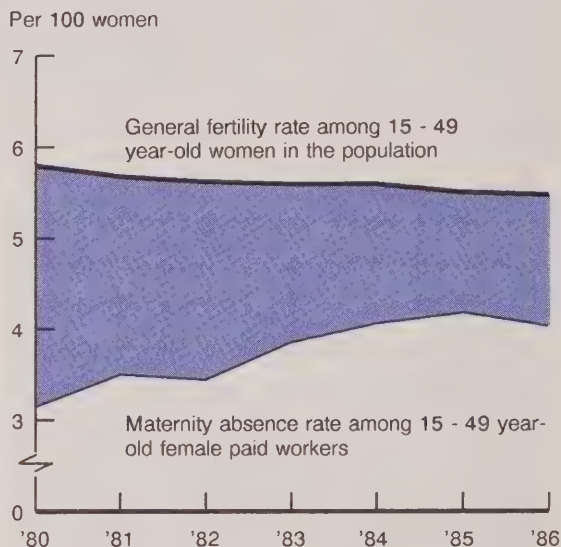
between 1980 and 1985. Since then, the number of absences has been stable.

Maternity absences among female paid workers aged 15 to 49 can also be expressed as incidence rates that can then be examined in the context of fertility rates for all women.² The incidence of maternity absences has exhibited a slight upward trend in the 1980s, increasing from 3.1% in 1980 to 4.2% in 1985, then sliding back to 4.0% for the subsequent two years. Canada's general fertility rate (expressed here as live births per 100 women 15 to 49 years of age in the population) declined during the 1980s, as it did during the 1960s and 1970s. From a peak level of 11.80 in 1957, the general fertility rate plummeted to 5.47 in 1986. But, the decline slowed with each decade; between 1980 and 1986 the rate slipped from 5.79 to 5.47.

Since the rate of maternity absence is lower than the general fertility rate, one can

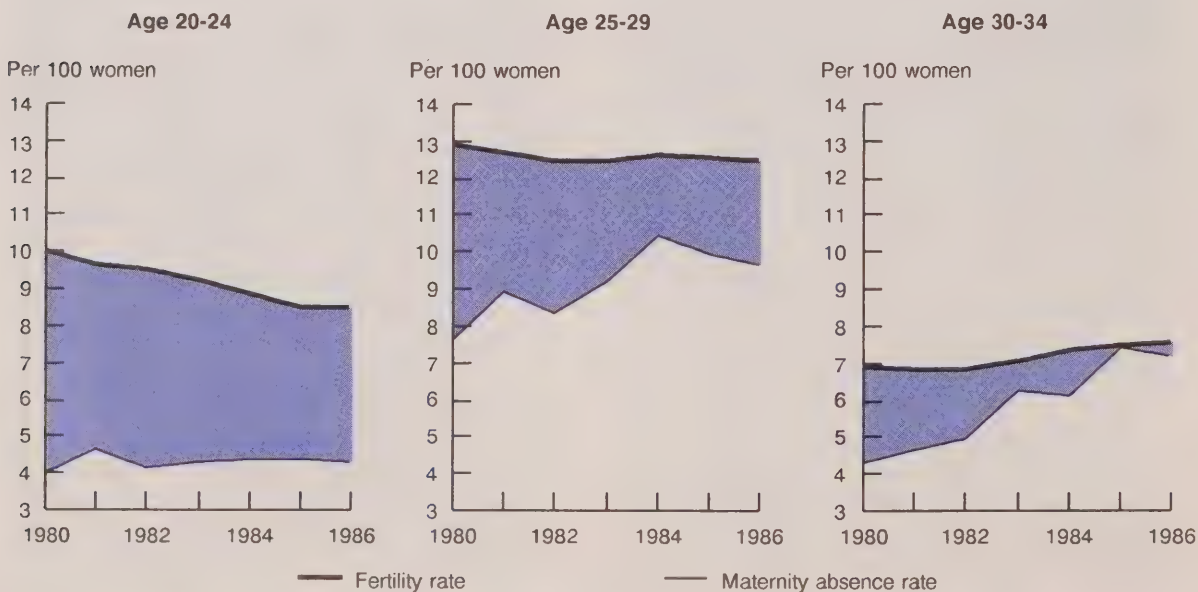
General Fertility and Maternity Absence Rates

The maternity absence rate rose during the 1980s, moving closer to a declining general fertility rate.



Fertility and Maternity Absence Rates Prime Child-bearing Age Groups

Since 1980, the fertility rate and the maternity absence rate have converged markedly for 30 to 34 year-olds.



infer that fertility is lower among working women than among women who are not employed. The slight trends in the data show that the incidence rate of pregnancy-related absence moved closer to the general fertility rate during the 1980s. This is not surprising, given the concomitant increase (from 67% to 73%) in the paid worker/population ratio for women 15 to 49 years of age.

The age factor and the education effect

Since the 1970s, women aged 25 to 29 have been the prime child-bearing group. Above and below this age, the fertility rate falls off quickly (Table 1). Fertility rates clearly dominate the relationship between the incidence of maternity absence and age. For each age group, the incidence of maternity absence is lower than the corresponding fertility rate – but not proportionally so. This is especially apparent for 20 to 24 year-olds versus 30 to 34 year-olds: the younger group has a much higher fertility rate but a much lower rate of maternity absence. Relative to age-specific fertility rates, maternity ab-

sences are almost twice as common among women 30 to 34 years of age compared with those who are ten years younger.

This phenomenon is not explained by the paid worker/population ratios for the two age groups. Women 20 to 24 years of age are more likely to be part of the work force than women in their early thirties; other things being equal, one would expect the younger age group to have the higher maternity absence/fertility ratio.

Why then is the maternity absence/fertility ratio of 30 to 34 year-olds so much higher? It may be the effect of postsecondary education. The pursuit of a postsecondary certificate or diploma or a university degree, followed by experience in the work force often requires a postponement of child-bearing – this "education effect" pushes the maternity absence rates for 20 to 24 year-olds and 30 to 34 year-olds in opposite directions. Working women in their early twenties who have a postsecondary degree, certificate or diploma are less likely to have a pregnancy-related absence than other working women of the same age – in many

Table 1
Maternity Absence and Fertility Rates

	Incidence of maternity absence	Fertility	Maternity absence/ fertility ratio	Paid worker/ population ratio
	1980-87 average	1980-86 average		1980-87 average
	%	births per 100 women		%
All ages (15-49)	3.79	5.61	0.68	69.1
15-19	0.62	2.53	0.25	59.3
20-24	4.35	9.19	0.47	81.6
25-29	9.08	12.59	0.72	74.0
30-34	6.12	7.14	0.86	67.5
35-39	1.44	2.08	0.69	68.3
40-44	--	0.31	--	65.7
45-49	--	0.02	--	61.1

Source: See note 2.

cases, these postsecondary graduates may have just begun their careers (Table 2). In contrast, 30 to 34 year-old working women who are postsecondary graduates may have ten or even more years of work experience to their credit and they are approaching the higher-risk ages in the reproductive cycle. Their response is a rate of maternity absence which averaged 9.4% from 1980 to 1987 – more than twice the comparable rate (4.3%) among 30 to 34 year-old working women who are not postsecondary graduates. The effect of postponing child-bearing to accommodate postsecondary education is even more pronounced among university graduates in this age group. For these women, the incidence of maternity absence between 1980 and 1987 averaged 11.4%.

Leave and benefit entitlements

The maternity leave provisions and benefits applicable to a working woman in Canada depend on the province in which she works, her employer, and perhaps whether she belongs to a union. Government employees are covered by federal or provincial public service acts. Provincial employment standards govern all other workers except those who work for inter-provincial and federally regulated organizations covered by the Canada Labour Code. Within any statutory jurisdiction, employers and collective agreements negotiated by unions may offer improved "packages" for maternity leave and benefits, which exceed the terms specified in the applicable legislation. (Many of the public service acts

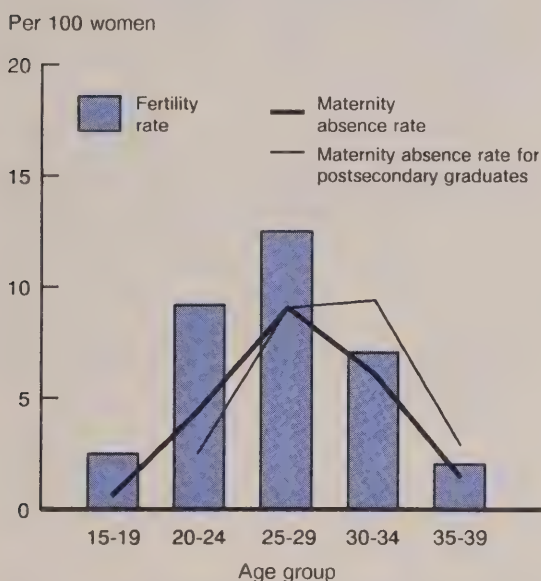
Table 2
Incidence of Maternity Absence, 1980-1987 Average

	Paid workers	Maternity absences	Incidence of maternity absence
	'000	'000	%
All ages (15 – 49)	4,538	172	3.8
Without postsecondary*	3,264	108	3.3
With postsecondary	1,274	64	5.0
15 – 19	597	4	0.6
20 – 24	923	40	4.3
Without postsecondary	674	34	5.0
With postsecondary	249	6	2.5
25 – 29	828	75	9.1
Without postsecondary	524	48	9.1
With postsecondary	304	28	9.1
30 – 34	706	43	6.1
Without postsecondary	451	19	4.3
With postsecondary	255	24	9.4
35 – 39	617	9	1.4
Without postsecondary	409	3	0.7
With postsecondary	209	6	2.8
40 – 44	483	--	--
45 – 49	384	--	--

* Refers to persons without a postsecondary certificate, diploma or degree.

Fertility and Maternity Absence Rates 1980-1987 Average

Maternity absence rates by age group reflect fertility rates, peaking for 25 to 29 year-olds, but postsecondary graduates often postpone maternity absence until their early thirties.



in fact do not provide maternity leave; it is the collective agreements of unions representing public servants that provide maternity leave.) (Canadian Advisory Council on the Status of Women, 1988.)

Working women in every statutory jurisdiction except the Northwest Territories are entitled to a period of unpaid maternity leave, but the length of that period varies.³ Provincial statutes and the Canada Labour Code allow 17 or 18 weeks; for public servants, provisions vary from four months in Prince Edward Island to 12 months in Saskatchewan. In most jurisdictions, an employee must complete some minimum period of employment with her employer. This qualifying period varies from 20 weeks (out of the 12 months preceding the leave) for Quebec workers to one year plus 11 weeks for women in Ontario. Most of these

provisions for unpaid maternity leave have been in effect throughout the 1980s.

Regarding sources of financial compensation, UI maternity benefits are the most widely available. These consist of 15 weeks of benefits at 60% of the employee's regular wage, up to a maximum which is increased each year.⁴ In 1987, for example, the maximum weekly benefit was \$318. As a rule, a woman must have worked 20 weeks within the last year to qualify for this benefit. Besides the annual increase in the maximum weekly benefit, certain changes to the maternity benefit program were introduced in January, 1984, including the elimination of the "Magic 10" rule, which required women to work at least ten weeks around the time of conception (Townson, 1985).

Despite these improvements in the UI maternity benefit program, a 1985 study for the Task Force on Child Care ranked Canada poorly, compared with 22 industrialized countries in eastern and western Europe. Fifteen of these countries pay maternity benefits of 90% to 100% of the employee's usual earnings, up to a weekly maximum, for periods ranging from six weeks to nine months. The same study, however, showed that maternity leave provisions in Canada compare favourably with those in the United States (Townson, 1985).

Is it possible that for working women the decision to become a parent could be influenced by access to enhanced maternity leave provisions and benefits offered in some collective agreements? The incidence of maternity absences is slightly higher in industries with relatively high rates of union membership among working women. To examine the relationship between maternity absences and union membership, incidence rates for maternity absence were calculated for four groups of industries: primary industries and construction; manufacturing, transportation and storage; public and regulated services; and all other

service industries.⁵ The industries within each group had roughly similar rates of union membership for paid jobs held by women in 1986. These broad industry groups have the same order when ranked by union membership or by maternity absence (Table 3). The public and regulated service industries, in which coverage by a collective agreement is most common (60.2%), also have the highest incidence of maternity absence (4.8%). The primary and construction industries, which have the lowest rate of union membership (5.2%), also have the lowest maternity absence rates (2.1%).⁶ However, the relationship between union membership and maternity absence is tenuous. For example, the rate of union membership in the manufacturing, transportation and storage industries is only half that of the public and regulated service industries; but the respective rates of maternity absence are very close – 4.0% and 4.8%.

Union membership does not **guarantee** better maternity leave provisions and benefits than those provided by legislation. For example, in the early 1980s, 49% of major collective agreements in Canada

contained sections pertaining to maternity leave; of those that did include maternity leave provisions, 71% exceeded legislated limits.⁷ Through the 1980s, financial compensation during maternity leave has become a more prominent issue – but as recently as 1988, paid maternity leave was provided in only 26% of major agreements (Labour Canada, 1988).

Provincial variation

The most remarkable feature of maternity absence rates among the provinces surfaces only when one examines maternity absence relative to fertility rates. By province, the incidence of pregnancy-related absence (averaged over 1980 to 1987) varies between 3.0% and 4.3% (Table 4). Although this range is small, it is surprising that the rate of 4.3% belongs to Quebec – the province with the lowest fertility rate. The ratio of the maternity absence rate to the fertility rate for Quebec, at 0.87, is significantly greater than the ratios for the other provinces, which range between 0.50 for Prince Edward Island and Newfoundland and 0.70 for Ontario.

Table 3
Characteristics of Female Paid Workers by Industry Group

	Incidence of maternity absence (15 – 49 year-olds) 1980-87 average	Rate of union membership in paid jobs held by women 1986*	Proportion of paid workers (15 – 49) in prime child-bearing age group (20 – 34) 1980-87 average
		%	
Primary and construction	2.1	5.2	49.4
Manufacturing, transportation and storage	4.0	29.2	56.2
Public and regulated services	4.8	60.2	54.9
Other services	3.2	9.6	53.3

* This rate counts as union members all workers who are covered by a collective agreement. Source: Unpublished data from the Labour Market Activity Survey.

Quebec has the highest rate of maternity absence even though it has the lowest fertility rate.

The high ratio for Quebec is the outcome of a fertility rate in continuous decline through the 1980s, combined with a generally increasing rate of maternity absence. In fact, since 1985, the estimated rate of pregnancy-related absence from work has exceeded the general fertility rate, suggesting that working women may have a higher fertility rate than those who are not employed.

What could account for this higher maternity absence/fertility ratio in Quebec? Neither the paid worker/population ratio nor

the age distribution of women offer a convincing explanation. Indeed, the paid worker/population ratio in Quebec is lower than the ratio for Canada. This fact, in isolation, would suggest that the maternity absence/fertility ratio for Quebec should be lower than that of Canada **unless** in Quebec the fertility rate is higher among working women than among women outside the work force. A comparison of the age distribution of the paid worker pool versus the population for 15 to 49 year-old women shows that, relative to Canada as a whole, Quebec may have a slightly higher concentration of working women in the prime child-bearing age groups (20 to 34 years of age), but the difference is small.

Table 4
Maternity Absence and Fertility by Province

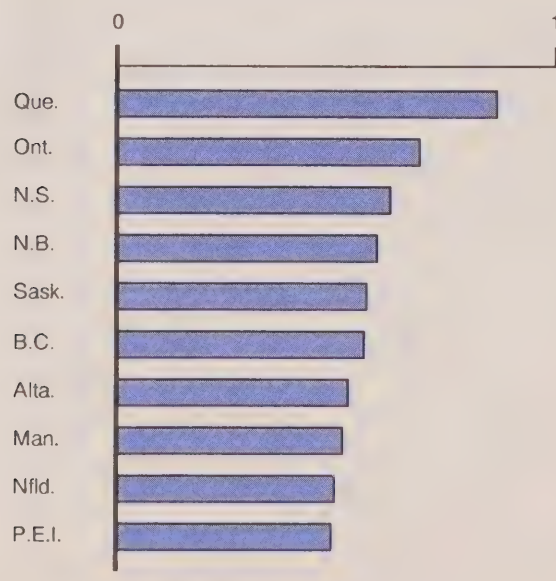
	Incidence of maternity absence	Fertility	Maternity absence/ fertility ratio
	1980-87 average	1980-86 average	
	%	births per 100 women	
Canada	3.79	5.61	.676
Newfoundland	3.04	6.06	.502
Prince Edward Island	3.07	6.21	.495
Nova Scotia	3.43	5.47	.627
New Brunswick	3.34	5.60	.596
Quebec	4.34	5.01	.866
Ontario	3.76	5.41	.696
Manitoba	3.22	6.22	.517
Saskatchewan	4.17	7.31	.571
Alberta	3.66	6.88	.532
British Columbia	3.26	5.73	.569

Source: See note 2.

The high maternity absence/fertility ratio in Quebec may in fact be related to superior maternity leave provisions and financial compensation. In addition to 18 weeks of "ordinary" maternity leave, Quebec legislation contains clauses for other types of leave related to pregnancy.⁸ Of equal note is a reassignment/leave program, which became operational in 1981 under the Act respecting occupational health and safety. The program provides for the reassignment of a pregnant worker who furnishes a medical certificate stating that her working conditions may be physically dangerous to her health or that of her unborn child. In cases where reassignment is not possible, the worker may then apply to the "Commission de la santé et de la sécurité du travail" for leave with 90% of her salary paid until the date of delivery. Most of the collective agreements for the Quebec public sector reaffirm this law (Church, 1986; "Commission

Ratio of Maternity Absence Rate to Fertility Rate, 1980-1987 Average

The ratio of the maternity absence rate to the fertility rate is significantly higher in Quebec.



de la santé et de la sécurité du travail", 1985).

Quebec has also been a leader with respect to paid maternity leave in collective agreements. The first major Supplemental Unemployment Benefits (SUB) plan for maternity in Canada was negotiated in 1979 by the Quebec common front, a group of public sector unions representing about 20% of the female labour force in Quebec.⁹ This plan introduced vastly improved financial compensation for maternity leave at a time when paid maternity leave was extremely rare. In 1980, only about 5.8% of major collective agreements in Canada provided fully or partially paid maternity leave. Since then, a number of public service agreements with maternity SUB plans have been negotiated, beginning with the contract won by the Canadian Union of Postal Workers in 1981. And as recently as 1987, the only provinces in which paid maternity leave was the norm were Quebec, Ontario and Manitoba.¹⁰

If enhanced maternity leave and benefits are a major reason for Quebec's high maternity absence/fertility ratio compared with other provinces, could this also explain the fact that since 1985, rates of maternity absence for this province have exceeded the general fertility rate? This would suggest that paid maternity leave and the option of returning to a paying job may remove some financial barriers to (or otherwise encourage) motherhood for working women in Quebec.

Compensation and duration of maternity absences

The following discussion relates to absences which had ended by the time of the survey; these comprise the major proportion (71%) of maternity absences from 1980 to 1987.¹¹

According to the AWS, the duration of maternity absences varies widely. A pregnancy-related absence may be shorter or

longer than the duration specified in maternity leave provisions.¹² For the period 1980 to 1987, however, absences of 17 weeks were the most commonly occurring length and accounted for 14.5% of all absences (Table 5). This reflects statutory provisions for maternity leave, as well as regulations of the UI program, which offer benefits for a maximum of 15 weeks following an initial two-week waiting period.

A surprisingly high proportion of ended absences were of short duration – 11% were from two to six weeks. This seems short for recuperation from childbirth, but in fact some of these absences may be sick leave taken for illness or medical complications earlier in the pregnancy.

The mean duration of ended maternity absences recorded by the AWS was 18.2 weeks, but the Maternity Leave Survey (MLS) offers an alternative (and more detailed) estimate.

Specifically, among women who had delivered live babies by the time of the

survey, 58% had returned to work as paid employees (and of these, 91% had returned to the same employer). The mean duration of work interruption for these women was 21.5 weeks: an average of 4.5 weeks before and 17 weeks after childbirth.¹³

The effect of financial compensation on the duration of ended maternity absences is very visible. From 1980 to 1987, compensation was received for 87% of these absences; the high proportion compensated is reflected in the most commonly occurring duration of 17 weeks. In contrast, the duration distribution of non-compensated absences has no peaks. The average duration is 14.6 weeks, and 57% of the absences are only 2 to 14 weeks long. This compares with 18.7 weeks and 24% for compensated absences.

The proportion of compensated maternity absences jumped from 77% in 1980 to 92% in 1987.

Table 5
Duration of Ended Maternity Absences, 1980-1987 Average

	Number of absences	Percentage of all absences
	'000	%
Duration (weeks)		
All durations (2 – 52)	122	100.0
2 – 6	13	10.7
7 – 15	28	22.8
16	10	8.4
17	18	14.5
18 – 19	7	5.8
20	11	9.0
21 – 26	18	14.7
27 – 39	14	11.4
40 – 52	4	2.9

Trends during the 1980s

Annual data for 1980 to 1987 do not exhibit sweeping changes in the length of maternity absences (although differences could be difficult to detect because single-year estimates are subject to a higher degree of sampling variability). There does appear to be a slight upward trend of about 0.3 weeks per year in the mean duration of ended absences, but the increase in duration is confined to compensated absences.

The proportion of compensated maternity absences jumped from 77% in 1980 to 92% in 1987 (Table 6). About two-thirds of this increase is accounted for by absences for which only UI was received (from 62% in 1980 to 72% in 1987). The increasing incidence of UI benefits appears to coincide with the more flexible rules implemented in January, 1984.

Other types of compensation include primarily pay from the employer and group

insurance. The incidence of these other types of financial compensation among ended absences also increased (from 14% in 1980 to 20% in 1987) although the trend is comparatively weak. The observed increase in non-UI types of compensation is less dramatic than the jump in the proportion of major collective agreements which provide for paid maternity leave – from 6% in 1980 to 26% in 1988 (Labour Canada, 1988).

Compensation among worker subgroups

Financial compensation rates for maternity absence differ markedly for full-time and part-time workers. This is not surprising because of the link between hours of work and the legal right to UI benefits.¹⁴ MLS data from the 1984 reference year show that, among women who worked only full-time schedules during the 12 months before they stopped working, 93% were compensated.

Table 6
Incidence of Compensation for Ended Maternity Absences, 1980-1987 Average

	Type of compensation as a percentage of ended absences*			
	Any	UI	UI only	Other
	%			
1980	76.6	67.4	62.3	14.3
1981	80.7	72.8	66.4	14.3
1982	84.8	74.2	64.6	20.2
1983	87.1	77.6	67.2	19.9
1984	88.5	83.2	71.2	17.3
1985	90.7	82.0	69.0	21.7
1986	92.0	83.7	72.1	19.8
1987	92.2	84.6	72.4	19.8
1980-87 average	87.3	79.0	68.6	18.7

* The categories "UI" and "Other" include absences for which multiple forms of compensation were received.

Unemployment insurance data

Statistics Canada obtains administrative data from Employment and Immigration Canada's (EIC) Unemployment Insurance program to prepare the quarterly publication *Unemployment Insurance Statistics*. The following table presents administrative data on the number of initial claims allowed for UI maternity benefits, along with AWS estimates of the number of women who received UI benefits for a maternity absence.

Number of Women Who Received Maternity Benefits

	EIC	AWS
	'000	
1980	107	91
1981	115	107
1982	123	115
1983	121	131
1984	130	148
1985	132	162
1986	137	157
1987	140	165

The incidence of compensation among women who worked part-time, year round was 83%; in contrast, less than 60% of part-timers who had worked less than the full year received compensation.¹⁵

Other worker characteristics such as industry, province, education, age and marital status, although important with respect to labour market activity, have a more subtle link to entitlement to compensation for maternity absence. Generally speaking, it is difficult to identify significant differences in the incidence rates for compensation among these worker groups – the rates are dominated by the wide availability of UI maternity benefits and the majority are over 80%. Rather, it is the availability of non-UI types of compensation that distinguishes certain subgroups. Among industry groups,

For most years, the differences between the two estimates are small enough to be attributable to sampling variability, in the AWS. However, the survey estimates are lower than the administrative figures from 1980 to 1982, and are higher for subsequent years. While the low AWS estimates in the early 1980s are puzzling, there may be a logical explanation for the high estimates in the latter years.

Administrative counts classify the type of claim at the time it is first processed. Because some claims are initially processed as regular or sickness benefits and are later changed to maternity benefits, the administrative counts underestimate the number of women who received UI benefits for a maternity absence.

In contrast, the AWS estimates count paid workers who receive any type of UI benefits for a maternity absence, including women whose initial (or entire) claim is for regular or sickness benefits.

public and regulated services have the highest incidence of compensation (89%), followed closely by the manufacturing, transportation and storage group, and the other services group. The primary and construction industries lag behind at 77%. This pattern is similar to that observed for absence duration (Table 7).

The disparity between this last industry group and the other three is apparent when one compares the proportion of maternity absences for which UI benefits were received. This gap is probably the combined effect of several factors. First, the high rate of self-employment and small average firm size in the primary and construction industries suggests that paid employment in a family business may be more common in this group of industries –

Table 7
Duration of Absence and Incidence of Compensation, 1980-1987 Average

	Average duration of ended absences	Percentage of ended maternity absences		
		Compensated	By type of compensation*	
			UI	Other
	weeks		%	
All industries	18.2	87.3	79.0	18.7
Primary and construction	13.7	77.3	68.6	--
Manufacturing, transportation and storage	17.0	86.9	79.6	--
Public and regulated services	19.3	88.9	78.9	27.5
Other services	17.6	86.3	79.5	11.9
Canada	18.2	87.3	79.0	18.7
Atlantic	16.1	85.6	78.8	15.4
Newfoundland	15.4	86.2	79.0	--
Prince Edward Island	16.2	83.9	80.5	--
Nova Scotia	16.0	83.7	76.6	--
New Brunswick	16.8	88.0	81.0	--
Quebec	20.1	91.9	80.5	35.3
Ontario	17.3	88.4	81.7	12.4
Prairies	18.3	81.5	73.7	Prairies and B.C. } 10.6
Manitoba	17.0	87.8	81.4	
Saskatchewan	17.5	80.6	69.9	
Alberta	19.1	79.6	72.6	
British Columbia	17.2	80.1	72.5	
All educational attainment levels	18.2	87.3	79.0	18.7
No postsecondary education	17.5	85.5	77.5	14.9
Some postsecondary	18.7	89.2	79.3	21.3
Postsecondary certificate or diploma	18.9	90.2	83.1	20.6
University degree	19.0	87.9	78.0	26.3
All ages (15-49)	18.2	87.3	79.0	18.7
15-19	--	46.0	--	--
20-24	18.1	83.0	75.6	12.7
25-29	18.0	90.2	82.9	19.0
30-34	18.8	87.1	78.3	21.1
35-39	18.3	92.9	78.0	30.3
40-44	--	--	--	--
45-49	--	--	--	--

* The categories "UI" and "Other" include absences in which multiple forms of compensation were received.

the family farm is a good example. But, until July 1987, workers employed by their spouses were not eligible for UI maternity benefits.¹⁶

Non-compensated and shorter absences may also be related to the seasonal nature of the work in these industries, which could limit eligibility for maternity benefits, especially if regular UI benefits are received shortly before the maternity absence. Finally, a generally lower profile of maternity absences is consistent with less bargaining power for maternity leave provisions and benefits in industries in which women are fewer in number.

Other types of financial compensation for maternity leave, such as pay from the employer and group insurance, are more common in the public and regulated services. Within this group of industries, a non-UI form of compensation was received in 28% of absences, compared with 12% for all other industries.

Compensation is most common in Quebec (92% of all absences); this is mainly due to the prevalence of non-UI types of compensation in this province – 35% (compared with 19% for Canada). The 20 weeks of paid maternity leave within the large public service, plus other maternity leave provisions and benefits unique to Quebec are likely contributing factors to relatively long maternity absences (averaging 20.1 weeks).

The incidence of compensation for the other provinces ranges from 80% to 88%. Rates are highest in Manitoba, Ontario and New Brunswick, and are lowest in the three most western provinces. Not surprisingly, this pattern is also reflected in UI incidence and may be the effect of higher shares of provincial employment in the primary and construction industries for the western provinces. For example, Saskatchewan, with its large agriculture industry, has the lowest incidence of UI among maternity absences (70%), nine percentage points below the rate for Canada.

The likelihood of compensation for maternity absence also differs according to characteristics such as age, level of education, and marital status. Sampling variability limits detailed analysis of small groups (especially for cross-classifications of these variables) but some general patterns are visible. Compensation for a maternity absence is less common among women who are under 25 years of age (especially among teenagers), women who have no postsecondary education, and women who are not married.

Paid maternity leave, which is relatively rare compared to UI benefits, is perhaps the more interesting aspect of compensation. It appears to increase with age and with the level of education. The true reasons for these findings may not be the ones which first come to mind. On the one hand, it may seem logical that working women with valuable labour market skills may be offered paid maternity leave as an incentive to return to their jobs. On the other hand, the realities of collective bargaining suggest that non-wage benefits negotiated between an employer and various unions tend towards uniformity. The observed pattern in non-UI paid maternity leave by age and education may in fact be related to industry patterns. For example, the proportion of female paid workers employed in public and regulated services increases with age (from 15 to 39 years) and these industries also account for larger proportions of workers with a postsecondary certificate, diploma or degree than of workers without a postsecondary education.

Conclusion

Despite a continuing decline in the general fertility rate of Canadian women, the incidence of maternity absence rose between 1980 and 1987.

The impact of maternity absence on the supply of female labour is greatest for postsecondary graduates in their early thirties. It also appears that maternity absence is more common among workers for whom maternity leave and compensation provisions are more generous. For example, we see a higher rate of absence and a higher incidence of non-UI compensation among absences in the public and regulated service industries and in the province of Quebec. The analysis in this study cannot establish a causal link between these two factors although, in the case of Quebec, the low general fertility rate suggests that the superior leave and compensation provisions play a role in the high incidence of maternity absence.

Although the proportion of absences with financial compensation is large and has grown through the 1980s, non-UI forms of compensation, such as payments from the employer, are still relatively rare. It is clear

that for most working women the cost of a maternity absence can be significant. Moreover, the current system of programs bears a price tag in terms of both direct expenditures and lost production. Of course, both private and social benefits accrue with the birth of a child. The former are obvious. The latter include growth in the labour supply in future decades.

But if **child-bearing** is an expensive proposition to combine with participation in the work force, it is only the tip of the iceberg – the costs of **child-rearing** are far greater. One of the most immediate costs incurred is that of childcare. The shortage of high quality affordable childcare confronts a large proportion of young working parents each year. The National Child Care Survey, conducted by Statistics Canada in October, 1988 will provide extensive information on this important issue. □

Notes

¹ From the estimates provided in the article by Lévesque (1988) it is clear that pregnancy-related absences constitute the smallest proportion of the total number of paid worker absences (about 20% in 1986). However, for female paid workers of prime child-bearing age, pregnancy absences are more common than the combined number of absences resulting from accident and illness.

² Although the incidence rates of pregnancy-related absences may be a useful and reasonable proxy for the fertility rate of working women, it is important to be aware of the conceptual and coverage differences between these two measures.

The general fertility rate published by Statistics Canada measures the annual number of live births per 1,000 women 15 to 49 years of age. Official rates for each of the provinces and territories, except Newfoundland, can be found in Statistics Canada's *Births and Deaths: Vital Statistics, Volume 1*. The official rate for Canada excludes Newfoundland and includes the two territories. For this study, a general fertility rate for Newfoundland was calculated from unrounded population estimates (provided by Demography Division) and published birth data. At the time of writing, births and fertility rates for 1987 were not available.

The AWS, a supplement to the LFS, is confined to the non-reserve, non-institutionalized civilian population in the ten provinces. The incidence rate of maternity absence estimated from the AWS pertains to women 15 to 49 years of age who worked as paid employees sometime during the reference year. The survey data may include absences for pregnancy that do not correspond to a live birth in the reference year, for example, absences due to medical complications early in a pregnancy, miscarriage and stillbirths. On the other hand, the incidence rates for maternity absence do not take account of multiple births.

³ In some statutes, employees in certain occupations, for example, domestic workers and professionals, are exempted from the maternity leave provisions.

⁴ The maximum insurable earnings level is raised each year in accordance with the average percentage increase in wages and salaries over the most recent eight-year period available from Revenue Canada/Taxation.

⁵ The "public and regulated services" group of industries includes communication and utilities, and education, health, social and government services. The "other services" group includes all other service-

producing industries except transportation and storage, which are grouped with manufacturing.

⁶ The industry codes for each respondent on the AWS file pertain to the current or most recent job at the time of the interview in February. This may not be the same job the respondent held preceding the absence(s) recorded for the previous calendar year. To take account of such cases, rates of maternity absence were also calculated for the reduced set of respondents with job tenure of 14 months or longer at the time of the interview. The incidence rates by industry group for this reduced sample are all somewhat larger than the rates for the full sample (reflecting the legal right to maternity leave after completing a qualifying period of job tenure), but the ranking of the rates is preserved. The full sample rates are used in Table 3 since they are subject to less sampling variability.

Pregnancy-related absences counted by the AWS include cases in which women resigned or were laid off from their jobs as well as those who began a period of maternity leave from their jobs. So the AWS incidence rates for pregnancy-related absence may overestimate the prevalence of formal maternity leave.

⁷ These two percentages (71% and 49%) are based on major collective agreements (excluding construction) for two separate years, 1982 and 1983 respectively. For 1982, agreements covering 200 and more employees were included in the data base; for 1983, data were available for agreements covering 500 and more employees (Labour Canada, 1984).

⁸ These include special maternity leave when there is a risk of miscarriage or a threat to the health of the mother, and leave for legal or spontaneous abortion and stillbirths (CCH Canadian Ltd., 1987).

⁹ The agreement provides 20 weeks of maternity leave at 93% of regular pay for those who qualify for UI maternity benefits. For the 15 weeks during which the UI benefits are payable the employer supplements them to make up 93% of regular pay. For the remaining five weeks, the employer pays the entire 93% of regular wages. Workers who do not qualify for UI maternity benefits receive ten weeks of benefits at 93% of their salary, paid by the employer, and a further ten weeks of unpaid leave (Labour Canada, 1984; Christopher Church, 1986).

¹⁰ The only other agreement with paid maternity leave was that of the Workers' Compensation Board Employees' Union in British Columbia. (Unpublished data on collective agreements covering 500 and more employees, in effect 31 December 1987, Bureau of Labour Information, Labour Canada.)

¹¹ The AWS collects data for up to two long absences which started during the reference year: the most recent and (if there was more than one) the previous absence. A "previous" absence coded as "pregnancy" often occurs

with a "most recent" absence also coded as "pregnancy", which implies that the first absence is probably related to sickness or medical complications earlier in the pregnancy, and the second absence is the one taken for childbirth. (Duration data from the 1980s support this hypothesis - the median durations are seven weeks for previous absences and 17 weeks for most recent ended absences.) The analysis of compensation and duration in this study relates to most recent ended absences.

Some caution is advised in interpreting the AWS duration measures. Among ended absences those of short duration are probably over-represented. (Assuming that the underlying distribution of duration is the same regardless of the starting date, the frequency distribution for ended absences is missing absences of more than about 13.5 months long, as well as a decreasing proportion of shorter absences.) The average duration of ended absences thus underestimates the average duration of all absences. For an unended absence, on the other hand, the duration recorded at the time of the survey serves only as a lower bound on the total length of the absence.

¹² Some collective agreements allow a pregnant employee to take sick leave when she is advised by her doctor to stop working before the expected date of delivery; also, a formal period of maternity leave may be followed by parental leave. These different types of leave, taken in succession, would constitute one long absence surrounding a pregnancy, and this is how they would show up in AWS data.

There are also situations in which the AWS duration of absence may measure something other than leave from an employer. Specifically, women who leave a job for pregnancy reasons are counted as absent by the AWS (and the duration of absence refers to absence from the work force). The same is true of women who resign from a job after some period of maternity leave; in these cases, the duration reported in the AWS could be either the duration of leave from the employer or the length of absence from the work force.

¹³ The AWS estimate for the mean duration of ended (most recent) absences in 1984 is only 18.7 weeks, almost three weeks less than the MLS mean duration of work interruption for women who had returned to work. Two factors which may contribute to this difference are: short pregnancy absences not associated with childbirth; and absences in which job separation occurs, as described in note 12.

¹⁴ Employment of 15 or fewer hours per week at a wage less than 20% of maximum insurable earnings is not insurable under the Unemployment Insurance Act.

¹⁵ The "full-time only" workers from the MLS are self-identified (without reference to hours of work per week). The "part-time only" workers are those who stated that they worked only part-time and fewer than 30 hours a week.

¹⁶ Until July 1987, workers were not eligible for UI maternity benefits if they were employed by their spouse (Unemployment Insurance Act, Section 3.2.c) or

by a corporation in which the employee or their spouse individually or in combination controlled more than 40% of the voting shares (Section 4.3.d).

References

Canadian Advisory Council on the Status of Women. *Becoming a Parent: A Guide to Maternity/Parental Leave and Benefits in Canada*. August 1988.

CCH Canadian Limited. *Canadian Labour Law Reports*, 1987.

Church, C. *Maternity and Parental Benefits in Canadian Collective Agreements*. Discussion paper prepared for the Women's Bureau, Labour Canada, August 1986.

Commission de la santé et de la sécurité du travail. *Annual Report*. 1985.

Labour Canada. *Maternity and Child Care Leave in Canada*. (Catalogue No. L24-1208/84E), 1985.

Labour Canada. *Non-Wage Trends in Collective Bargaining in Canada*. Bureau of Labour Information, October 1988.

Lévesque, J.-M. "Work Absences and Compensation, 1979-1986," *The Labour Force*. Statistics Canada (Catalogue No. 71-001), April 1988.

Statistics Canada. *Unemployment Insurance Statistics*. (Catalogue No. 73-001, quarterly).

Statistics Canada. *Births and Deaths: Vital Statistics*. Volume 1 (Catalogue No. 84-204, annual).

Townson, M. "Paid Parental Leave Policies: An International Comparison, With Options for Canada," in *Series 4 Child Care: The Employer's Role*. Background paper for the *Report of the Task Force on Child Care*, Status of Women Canada (Catalogue No. SW 43-1/4-1985E), December 1985.

Chart references

The four charts deal with the general fertility rate and the maternity absence rate. The general fertility rate shows the annual number of live births per 1,000 women aged 15 to 49. The maternity absence rate is the

proportion of female paid workers in the same age group who were absent from work in a given year because of pregnancy. See note 2 for further details.

The Changing Face of Temporary Help

Ernest B. Akyeampong

The temporary help industry in Canada traces its origins to the 1950s, a period during which women began to enter the work force in large numbers. According to industry sources, the focus in those days was the supply of clerical, secretarial and manual labour to fill in for permanent employees who were sick, on maternity leave or on vacation. Most of the jobs were of short duration. However, over the years, the industry has evolved to meet the diversified and changing needs of Canadian businesses. Today, many workers contracted out have specialized professional and technical skills. And these persons are often hired as supplementary labour rather than as temporary replacements for permanent staff absent from work.

The temporary help industry consists **primarily** of firms which provide temporary workers on contract to other establishments.¹ The temporary help agency charges the receiving establishment an hourly wage to cover the worker's earnings and a mark-up for its services. The worker is supervised by the receiving firm but remains on the payroll of the supplying agency.

This paper examines the reasons why businesses use temporary help (demand factors) and why some workers offer their services under this type of arrangement

(supply factors). It also traces recent employment trends in the industry and highlights the socio-demographic characteristics of its workers, including the kinds of jobs held by them.

Sources of demand

Employers choose to use temporary help supplied by agencies for various reasons, but the overriding one appears to be **cost minimization**. For example, temporary workers may be taken on only when needed by businesses with sharply fluctuating peak-loads or whose activities are seasonal, as well as by those which require specialized professional services or skills for only a brief period. This way, the firm minimizes labour underutilization. Uncertainty about the economic climate may cause some employers to seek temporary help: these workers can be let go with relative ease if they are no longer needed. Employers are also able to reduce costs associated with the hiring and training of new permanent employees by taking this route. Finally, use of temporary rather than permanent workers can reduce some labour-related "fringe-costs" (for example, employer contributions to group pension or dental plans).

Apart from cost minimization, temporary workers also fill in for permanent employees absent due to vacation, illness or maternity leave, thus ensuring the continuity of the firm's daily operations.

Ernest B. Akyeampong is with the Labour and Household Surveys Branch. He can be reached at (613) 951-4624.

Sources of supply

People seek temporary jobs for a variety of reasons. For some, the work schedules of such jobs offer more flexibility to attend to other demands such as childcare, school or the desire for more leisure time. For others, temporary jobs are an intermediate step in the search for permanent work in the receiving firm or elsewhere. They also provide an opportunity to exercise or upgrade personal skills, or acquire a wider range of experience. For women entering the job market after a long absence, these jobs may provide an opportunity to polish old skills, learn new ones, and improve their marketability. Finally, some people use temporary help agencies simply to reduce the time, bother and costs associated with job search.

Employment trends

The temporary help industry's share of the national non-agricultural work force is small (only 0.6% in 1987). According to the Survey of Employment, Payrolls and Hours (SEPH), employment in the industry rose from 57,000 in 1983 to a peak of 73,000 in 1985 (Table 1). Since then it has fallen to 63,000 in 1987.²

Table 1
Employment Levels, 1983-1987

	Temporary help industry*	Industrial aggregate**
	'000	
1983	57	9,075
1984	58	9,151
1985	73	9,512
1986	71	9,706
1987	63	9,946

* Includes personnel suppliers and employment agencies.

** Excludes agriculture, fishing, trapping, religion and private households.

Employment in this industry is sensitive to cyclical factors; that is, it reflects changes in employers' hiring strategies triggered by changes in economic conditions. For example, in the early stages of an economic recovery, cautious employers are more likely to hire temporary labour. Not surprisingly, between 1983 and 1985, employment in this industry increased by 27% compared with an overall employment growth of only 5%. As the economic recovery matures and employers become more convinced that growth will continue, temporary workers tend to be replaced by permanent employees. In short, the initial cyclical rise in the use of temporary help tends to slow or even decline over the course of economic expansion. In Canada, the latest cyclical surge in temporary help employment growth seems to have ended in the fall of 1985. While employment in the economy as a whole has continued to rise since then, the number of workers in the temporary help industry has registered declines.³

Seasonal factors also play a role in employment levels in the temporary help industry. Data from SEPH show that employment is relatively high during the summer months. Several factors account for the increase during this period, including rising work-loads in seasonal industries such as agriculture and an increased use of temporary replacements for permanent employees on vacation.

Worker profile

Women are the mainstay of the temporary help industry: in 1986, about 76% of the industry's paid workers were female (Table 2). In contrast, women accounted for only 45% of all paid workers employed at some time in 1986. Adult females outnumbered young females by a ratio of 2:1. Close to one-half of the women employed in the temporary help industry were married.

The Labour Market Activity Survey

Worker and job profile data are derived from the Labour Market Activity Survey (LMAS). This household survey provides information on the labour market participation patterns of the Canadian population over the full calendar year and identifies the characteristics of jobs held during that period (up to five jobs). Because the LMAS covers activities undertaken at any time during the year, this survey's employment estimates are higher than the annual average estimates derived from monthly SEPH data.

The LMAS offers two distinct ways of looking at the labour market. First, the data on **worker** characteristics show that 81,000 people worked as paid employees in the temporary help industry at some time in 1986. Second, the data on **job** characteristics show that these people

worked at 87,000 paid jobs in that industry. In other words, some people worked for more than one temporary help agency or they changed jobs within an agency (meaning they underwent a change of both duties **and** wage rate) during the year. Thus, the 87,000 paid jobs are in reality paid "person-jobs", which represent the collective job-holding experience of all paid workers in the industry. Across all industries, 12.0 million paid employees worked in 14.8 million paid "person-jobs" in 1986.

The difference between a job (in the usual sense) and a "person-job" may be illustrated by the case of an employer who has one position which exists for the entire year but is occupied by three persons in turn. In the LMAS, this position would be viewed as three "person-jobs".

An information manual on the LMAS is available on request from Richard Veevers at (613) 951-4617.

The predominance of women in the industry may conform to popular perception, but the educational attainment of its workers does not. In general, workers supplied by temporary help agencies are better educated than the overall work force. In 1986, about 37% of them had a postsecondary certificate or diploma, or university degree; the corresponding proportion was 29% across all industries. This finding reinforces the perception that the industry is in evolution. As will be seen later in this paper, businesses are demanding qualified professionals – programmers, accountants, engineers – on a temporary basis, and the temporary help industry is diversifying to meet the demand. The educational requirements of temporary clerical workers may also be pushed up by the demand for specialized abilities and

skills, for example, the ability to use micro-computers. Some of these workers may be "over-qualified"; for them a clerical job may be a stepping-stone to a more suitable permanent job. In 1986, about 30% of the temporary agencies' paid clerical jobs were held by workers with a postsecondary certificate or diploma, or university degree; across all industries, the corresponding proportion was 23%.

One might expect that a temporary help worker would be more likely to receive unemployment insurance benefits than a general worker. The data do not support this supposition. In 1986, the proportion of temporary workers who reported collecting unemployment insurance benefits was identical to the all-industry average (17%). It is possible that many of these temporary workers are continually employed at one

Table 2
Paid Workers Employed at Some Time
in 1986*

	Temporary help industry	All industries
	%	
Age and sex	100	100
Men	24	55
16-24 years	10	13
25-69 years	14	41
Women	76	45
16-24 years	25	12
25-69 years	52	34
Sex and marital status	100	100
Men	24	55
Married	11	35
Single	13	17
Other	-	2
Women	76	45
Married	35	28
Single	32	13
Other	10	4
Educational attainment	100	100
0-8 years	--	9
Secondary	45	50
Some postsecondary	17	12
Postsecondary certificate or diploma	19	15
University degree	18	14
Unemployment insurance recipient in 1986	100	100
Yes	17	17
No	83	83

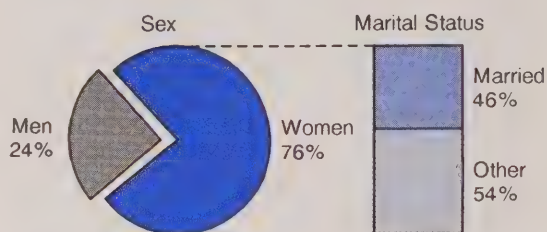
* These are persons with at least one paid job in 1986; a few of them were also self-employed (incorporated or unincorporated) and/or unpaid family workers at some time that year.

temporary job after another. Some eventually find permanent employment elsewhere or quit work to return to school. Others who leave their temporary jobs may not have worked long enough to qualify for unemployment insurance benefits.

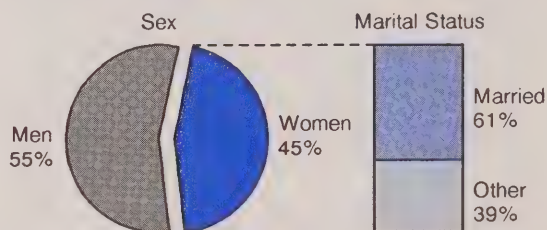
Employed at Some Time in 1986

Women predominate among temporary help workers.

Temporary help industry



All industries



Job profile

As expected, many of the paid positions filled by workers from the temporary help agencies are of short duration. In 1986, about 45% of these jobs ended within three months (Table 3). Only 18% of positions across all industries were held for such a limited period. At the other end of the job tenure scale, about 27% of the temporary help industry positions lasted at least the full year compared with 61% of positions in all industries.

Part-time employment is more prevalent among temporary help workers. In 1986, slightly more than one in three paid jobs in this industry was part-time (less than 30 hours per week); in comparison, part-time employment represented only one in

five paid jobs in all industries.

In 1986 the majority of paid jobs (58%) filled by the temporary help industry workers were in the female-dominated clerical occupations; about four out of ten of these were stenographic and typing jobs. In contrast, clerical jobs accounted for only 18% of all jobs in all industries that year.

At 19%, the proportion of temporary jobs in managerial and professional occupations was high. Although the corresponding figure for all industries was higher (27%), much of the difference can be attributed to the fact that the number of

temporary workers in religious, teaching, artistic, literary and recreational occupations is negligible since only a few are sought from the agencies.

The wage a temporary help worker receives excludes the supplying agency's mark-up. In 1986, the average hourly wage rate paid to these workers was \$8.17 compared with an all-industry average of \$10.26. For clerical workers, the difference was somewhat narrower: the hourly wage rate was \$7.29 in the temporary help industry and \$8.80 across all industries.

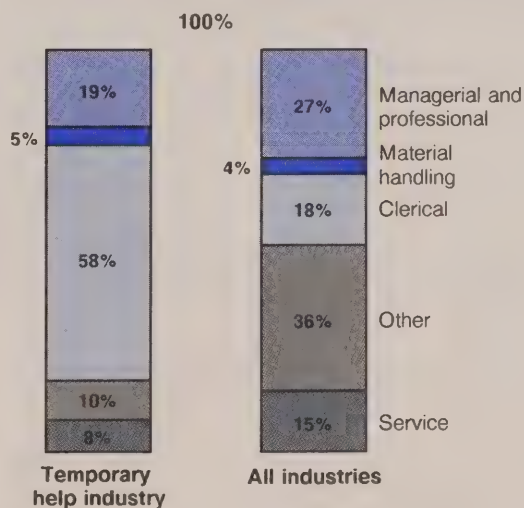
Table 3
Paid Jobs Occupied at Some Time in 1986

	Temporary help industry	All industries
	%	
Job tenure	100	100
Under 4 weeks	12	4
4-13 weeks	33	14
14-26 weeks	16	11
27-51 weeks	12	10
52 weeks or more	27	61
Full-time/part-time status	100	100
Full-time jobs	64	78
Part-time jobs	36	22
Occupation	100	100
Managerial and professional	19	27
Government managers and administrators	—	0.4
Others managers and administrators	13	10
Natural and social sciences, engineering, mathematics and medicine	6	10
Religious, teaching, artistic, literary and recreational	—	7
Clerical	58	18
Stenographic and typing	24	4
Service	8	15
Material handling and other crafts	5	4
Other*	10	36
Average hourly wage	\$8.17	\$10.26

* Includes sales, primary, processing, construction and transportation occupations.

Occupational Distribution of Jobs Held in 1986

Three in five jobs filled by temporary help workers are clerical; one in five is managerial or professional.



Summary

The temporary help industry accounts for less than one percent of the national work force. But in Canada's ever-changing economy, employment agencies offer numerous advantages to businesses and workers.

Compared with other industries, women are over-represented in the temporary help industry; its workers are also more likely to work part-time. The majority of jobs provided by the industry are

clerical, but one in five is in a managerial or professional occupation. Finally, compared with the overall work force, employees in this industry are better educated. □

Notes

¹ This industry is identified as "Employment agencies and personnel suppliers" in the *Standard Industrial Classification, 1980*, Catalogue 12-501E. As its name implies, the industry has two components: employment agencies (SIC 7711) and personnel suppliers (SIC 7712). Employment agencies list employment vacancies, and select, refer and place applicants for employment in other firms on either a permanent or temporary basis for a one-time fee. The workers so placed come under the payrolls of the receiving firms and hence do not form part of the temporary help industry's work force; however, the staff who work directly for the employment agencies do. Personnel suppliers place their own employees in clients' offices or plants on a temporary basis for a fee which covers the workers' earnings and a service mark-up. Such contracted-out personnel – as well as the personnel suppliers' own staff – are part of the temporary help industry's work force.

Of the two components, the personnel suppliers are, by far, the larger group in terms of employment. Estimates based on studies undertaken by Dr. Lawrence Fric

of the University of Western Ontario suggest that personnel suppliers accounted for about 80% of the industry's total employment in 1987. Dr. Fric also estimated their payroll for staff contracted out in 1987 at around \$700 million.

² The data in this section are annual averages derived from the Survey of Employment, Payrolls and Hours (SEPH), an establishment-based survey that provides detailed monthly data by industry on paid employment, average weekly earnings, average hourly earnings, and average weekly hours worked. SEPH estimates of paid employment, which include working owners of incorporated businesses, date from 1983. SEPH covers all industries except agriculture, fishing, trapping, religion and private households. For more information, see *Employment, Earnings and Hours*.

³ Similar cyclical effects on this industry's employment were observed in the United States economy. For a detailed analysis, see Carey and Hazelbaker (1986).

References

Carey, M. L. and K. L. Hazelbaker. "Employment Growth in the Temporary Help Industry," *Monthly Labor Review*. Bureau of Labor Statistics, April 1986, pp. 37-44.

"Drake Personnel in Perspective: Effective Use of Temporary Staffing," *Drake Business Review*. Vol. 3, No. 4, pp. 5-6.

Hingsburger D., J. Valcourt and V. Valcourt. "Just Filling In: The Temporary Supervisor," *Drake Business Review*. Vol. 3, No. 1, pp. 34-35.

Howe, W. J. "Temporary Help Workers: Who They Are, What Jobs They Hold," *Monthly Labor Review*. Bureau of Labor Statistics, November 1986, pp. 45-47.

Knudsen E. "Planning Ahead: The Key to Hiring a Temporary Employee," *Drake Business Review*. Vol. 2, No. 1, pp. 22-23.

Mangum, G., D. Mayall and K. Nelson. "The Temporary Help Industry: A Response to the Dual Internal Labour Market," *Industrial and Labor Relations Review*. Cornell University, July 1985, Vol. 38, No. 4, pp. 599-611.

Organisation for Economic Co-operation and Development. *OECD Employment Outlook*. September 1987, pp. 35-41.

Powers, O. S., H. M. Traugh and J. E. Maddox. "Temporary Help – A Staffing Alternative," *CMA: The Management Accounting Magazine*. The Society of Management Accountants of Canada, May-June 1987, pp. 46-49.

Sacco, S. R. "Temporary Help: A Full Time Resource," *Drake Business Review*. Vol. 3, No. 2, pp. 8-9.

Statistics Canada. *Employment, Earnings and Hours*. Catalogue No. 72-002.

Chart references

Employed at Some Time in 1986: Labour Market Activity Survey, unpublished data.

Occupational Distribution of Jobs Held in 1986: Labour Market Activity Survey, unpublished data.

Bilingualism and Earnings

Jean-Marc Lévesque

Bilingual Canadians who worked full-time throughout 1985 earned on average \$28,800, while their unilingual colleagues earned \$26,400. But it would be rash to attribute the difference simply to being bilingual rather than unilingual; differences in earnings arise from many factors. This study examines the importance of language – in particular the knowledge of French and English – in relation to these other factors.

Several studies have already demonstrated differences in economic status between the major linguistic groups in Canada. This study has three noteworthy features. First, it focuses on employees (paid workers) who work full-time, year-round rather than on all workers. This eliminates a major source of income differentials, namely the amount of work done during the year. Second, linguistic affiliation is determined by home language rather than mother tongue.¹ Finally, the study draws on relatively recent data from the 1986 Census.

The focus is on three urban centres: Montreal, Toronto and Ottawa-Hull. The size of their bilingual population allows for a reasonably in-depth analysis. According to the 1986 Census, these three metropolitan

areas were home to two million employees who worked full-time throughout 1985. Among employees who spoke English or French at home, 36% reported they were bilingual. The Montreal metropolitan area had by far the highest number of bilingual employees (422,000), followed by the Ottawa-Hull area (120,000) and the Toronto area (87,000).

Sources of earnings differences

Place of residence and home language

Earnings vary from one area to another. The average earnings of full-time employees who worked throughout 1985 was \$28,200 in Toronto.² The average was higher in Ottawa-Hull (\$29,600), but lower in Montreal (\$26,100). As Table 1 illustrates, it would be unwise to compare the average earnings of bilingual and unilingual workers without taking place of residence into account.

Average earnings also vary according to the language spoken at home. For example, francophone Montrealers earned on average \$25,800 in 1985, while their anglophone counterparts earned \$29,200. Table 1 shows further that the earnings gap between unilingual and bilingual workers in each urban centre varies by home language. The widest gap occurs among francophones in Toronto, the narrowest among anglophones in Montreal.

Jean-Marc Lévesque is with the Labour and Household Surveys Analysis Division and can be reached at (613) 951-9732. He would like to thank John Armstrong for his helpful comments on the methodology of the study.

Table 1
Average Earnings by Knowledge
of Official Languages and Home
Language, 1985

	Montreal	Toronto	Ottawa- Hull
All employees*	\$26,100	\$28,200	\$29,600
Anglophones	\$29,200	\$29,000	\$31,100
Bilingual	\$29,600	\$34,700	\$34,300
Unilingual	\$28,200	\$28,500	\$29,600
Francophones	\$25,800	\$31,200	\$26,900
Bilingual	\$28,200	\$31,600	\$27,800
Unilingual	\$22,000	\$20,800	\$21,000
Both languages spoken at home	\$25,000	\$27,200	\$26,200
Others	\$19,900	\$22,400	\$25,800

* Employees who worked full-time throughout 1985.

The earnings differences between the linguistic groups may be due to several factors. Among these are differences in the age and sex composition of these groups, in their educational attainment, occupational composition and even industrial sector. The impact of these different variables on earnings is examined below to demonstrate the need to take these factors into account in comparing the earnings of bilingual and unilingual workers.

Effect of age and sex on earnings

It should be noted at the outset that the average earnings of women in urban areas are approximately two-thirds those of men (Table 2). Of two groups of workers, the one containing the higher proportion of women will therefore tend to have lower average earnings.

The proportion of women among full-time, full-year employees varies somewhat by linguistic group. Among anglophones, the ratio is approximately 40%. This holds

1986 Census data

Respondents were classified as **bilingual** or **unilingual** according to their answer to the following question:

Can you speak English or French well enough to conduct a conversation?

This question distinguishes persons who know English and French (bilingual) from those who know only one of the two official languages (unilingual) and those who know neither.

The study also refers to **franco-phones** and **anglophones**. This information is obtained from the following Census question:

What language do you yourself speak at home now? (If more than one language, which language do you speak most often?)

In most cases, the data are collected by self-enumeration.

true for both bilingual and unilingual workers. On the other hand, the proportion of women is not the same among bilingual and unilingual francophones. The difference is most noticeable in Ottawa-Hull, where women comprise 52% of unilingual employees and only 42% of bilingual employees. This difference could contribute to the earnings gap between unilingual and bilingual francophones.

The same is true for a group's age composition: for example, Table 2 shows that average earnings for employees under age 35 are much lower than the earnings of workers above this age. Thus, a group containing a high proportion of employees under age 35 will tend to have lower average earnings than a group of older employees.

Composition of the Linguistic Groups Used in This Study

Language(s) spoken at home	Knowledge of official languages	Linguistic group	Employees* (in thousands)		
			Montreal	Toronto	Ottawa-Hull
English only (or English and a non- official language)	English only	Unilingual anglophone	47	804	108
	English and French	Bilingual anglophone	95	76	52
French only (or French and a non- official language)	French only	Unilingual francophone	185	--	9
	English and French	Bilingual francophone	299	5	59
English and French		Both languages spoken at home	28	6	9
Neither English nor French		Others	48	130	8
		Total	702	1,020	244

* Employees who worked full-time throughout 1985

Table 2
Average Earnings by Age and Sex, 1985

	Montreal	Toronto	Ottawa- Hull
Men	\$29,900	\$33,100	\$33,900
15 - 24	\$16,100	\$17,600	\$16,800
25 - 34	\$26,500	\$28,600	\$28,400
35 - 44	\$34,100	\$37,600	\$38,500
45 and over	\$33,500	\$37,700	\$39,600
Women	\$20,000	\$21,300	\$23,200
15 - 24	\$13,900	\$15,000	\$15,500
25 - 34	\$19,900	\$21,500	\$22,800
35 - 44	\$22,600	\$23,600	\$26,400
45 and over	\$20,800	\$21,700	\$24,500

In Montreal, unilingual anglophones tend to be older than bilingual anglophones (Table 3). Only one in three unilingual employees is under 35, compared to almost one in two bilingual employees. This age

Table 3
**Proportion of Employees under Age 35
by Linguistic Group, 1985**

	Montreal	Toronto	Ottawa- Hull
	%		
Anglophones			
Bilingual	47	48	43
Unilingual	30	44	42
Francophones			
Bilingual	45	44	47
Unilingual	48	42	49
Both languages spoken at home	37	39	41
Others	32	30	31

difference is reflected in the higher earnings of unilingual anglophones relative to their bilingual counterparts.

In short, the age structure of bilingual and unilingual worker groups is

not the same. A comparison of the average earnings of the two groups needs to take this difference into account.

Education

As might be expected, the earnings differential by level of education is very pronounced. Thus, university-educated employees earned on average \$9,000 over the average for all employees.

Judging from Table 5, the proportion of university-educated workers varies by language group. Bilingual persons are more likely to hold a university degree and this is true for both anglophones and francophones.

Table 4
Average Earnings by Level of Schooling, 1985

	Montreal	Toronto	Ottawa-Hull
Elementary and secondary	\$21,900	\$23,600	\$23,300
Other non-university education	\$24,700	\$26,500	\$26,200
University	\$34,400	\$37,000	\$38,200
Without degree	\$29,400	\$31,100	\$30,700
With degree	\$38,100	\$40,400	\$41,700

Table 5
Proportion of University-educated Employees by Linguistic Group, 1985

	Montreal	Toronto	Ottawa-Hull
		%	
All employees	28	29	37
Anglophones	41	30	41
Bilingual	45	61	55
Unilingual	32	27	35
Francophones	25	42	29
Bilingual	32	43	31
Unilingual	13	15	17
Both languages spoken at home	28	33	26
Others	20	22	39

Occupation

The distribution of employees by occupation explains a large part of the earnings differentials. The average earnings of the senior managers, the highest-paid group, are about three times the average recorded for unskilled workers³ (Table 6).

In all three metropolitan areas, bilingual persons are over-represented in the most highly paid occupational groups (Table 7). In Montreal and Ottawa-Hull, the

Table 6
Average Earnings by Occupational Group, 1985

	Montreal	Toronto	Ottawa-Hull
Professionals	\$34,000	\$36,900	\$38,000
Senior managers	\$49,300	\$61,400	\$48,600
Semi-professionals and technicians	\$26,900	\$29,000	\$29,900
Middle managers	\$33,900	\$36,700	\$35,600
Supervisors	\$23,900	\$28,900	\$28,600
Skilled workers	\$23,800	\$25,200	\$25,500
Semi-skilled workers	\$20,200	\$21,300	\$20,900
Unskilled workers	\$18,900	\$20,100	\$19,000

Table 7
Proportion of Employees in the Top Five Occupational Groups, 1985*

	Montreal	Toronto	Ottawa-Hull
		%	
All employees	39	40	49
Anglophones	48	42	52
Bilingual	50	61	60
Unilingual	44	41	49
Francophones	38	52	43
Bilingual	45	53	44
Unilingual	27	23	32
Both languages spoken at home	36	41	39
Others	23	23	41

* Refers to the first five groups in Table 6.

proportion of employees in highly qualified occupational groups is also higher among anglophones than among francophones. In Toronto, the opposite is true: the proportion of workers in the most highly qualified occupational groups is larger among francophones than among anglophones.

It should be noted that the occupational groupings used in this study are based largely on the average level of education of the members of each occupation (see note 3).

Industry

Do earnings also vary by industry? To study this question, industries were clustered into three sectors: goods-producing, non-government services and government services⁴ (Table 8).

Employees in the government services sector earn higher salaries than their counterparts in the other two sectors. Table 9 shows that, except in Toronto, bilingual employees are over-represented among government workers.

In summary, it may be stated that age, sex, education, occupation and industry all seem to have an impact on earnings. The composition of the bilingual and unilingual employee groups among both anglophones and francophones may vary considerably according to these characteristics.

Table 8
Average Earnings in Three Industrial Sectors, 1985

	Montreal	Toronto	Ottawa-Hull
Goods-producing	\$25,900	\$28,100	\$28,900
Non-government services	\$25,600	\$27,900	\$26,700
Government services	\$30,600	\$31,200	\$33,900

Table 9
Proportion of Employees in the Government Services Sector by Linguistic Group, 1985

	Montreal	Toronto	Ottawa-Hull
	%		
All employees	9	7	41
Anglophones			
Bilingual	4	8	54
Unilingual	1	8	36
Francophones			
Bilingual	12	8	43
Unilingual	9	8	16
Both languages spoken at home	7	6	39
Others	2	4	26

Relationship between earnings and bilingualism

In this section, the differences between the salaries of bilingual and unilingual workers are examined, taking into account age, sex, linguistic group (anglophone or francophone), occupation, education and industry. Regression analysis is a technique that makes such an examination possible.

The results shown in Table 10 indicate that, in general, the average earnings of bilingual workers are higher, taking into account the effect of these variables.⁵ Yet bilingualism does not necessarily "explain" the observed earnings differences. Other variables could come into play, including work experience, union membership and field of study. In addition, the regression method used is only one of several possible approaches. Nonetheless, it is interesting to note that, even when the effect of the variables listed above is held constant, there remains an appreciable difference between the earnings of unilingual and bilingual workers in Montreal and Ottawa-Hull.

Regression analysis

Regression analysis was used to examine the earnings differences between bilingual employees and unilingual employees, by sex and region, holding constant the effect of age, education, occupation and industry. A "multiplicative" or "logarithmic" regression model was used, which is appropriate if the effect of these variables on earnings, measured in dollars, increases as earnings increase. In other words, the effect is assumed to be stable in relative terms. This model is usually used in the regression analysis of income data. It takes the following form:

$$\text{Log } Y_{ijkmn} = \text{Log } C + \text{Log } A_i + \text{Log } L_j + \text{Log } I_k + \text{Log } P_m + e_{ijkmn}, \text{ where}$$

- Y_{ijkmn} is the earnings of person n in age group i , linguistic group j , industry k , and occupation and education group m ;
- C is a constant;
- A_i is the effect of belonging to age group i ;
- L_j is the effect of belonging to linguistic group j ;
- I_k is the effect of belonging to industry group k ;
- P_m is the effect of belonging to occupational and educational group m ;
- e_{ijkmn} is the effect of factors not included in the model on the earnings of person n (the expected value of this term is assumed to be 0).

The variables were categorized as follows:

Age: 17 age groups (15-17, two-year sub-groups in the 18-39 age range, 40-44, 45-49, 50-54, 55-59 and 60 and over);

Linguistic group: four groups (bilingual and unilingual francophones and anglophones);

Industry: three groups (goods-producing, non-government services and government services);

Occupation and education: 16 groups (the eight occupational groups broken down by two educational levels, the "higher" and "lower" level, where the "higher" level comprises persons who have attained or exceeded the median educational level for employees of the occupational group in question).

Technical details on this analysis are available from the author.

Table 10
Difference in Earnings between
Bilingual and Unilingual Employees,
Holding Constant Age, Sex, Education,
Occupation and Industry

	Montreal	Toronto	Ottawa-Hull
Men			
Anglophones	2%-6%	-0.4%-2%	3%-6%
Francophones	5%-7%	*	7%-15%
Women			
Anglophones	5%-10%	3%-5%	3%-7%
Francophones	8%-10%	*	9%-17%

* Results are not shown because the unilingual groups in question were judged to be too small.

Should we have expected similar results for the three cities? One might expect the demand for a knowledge of French to be more limited in Toronto than in the other two urban centres, since francophones (the smaller of the two linguistic groups) represent less than 2% of all Torontonians. In Montreal and Ottawa-Hull, the minority group constitutes a large proportion of the population.

Conclusion

The goal of this study was to examine the relationship between earnings and bilingualism (without, of course, presuming that the advantages of bilingualism are limited to financial gain). A regression technique often used to study income differences between linguistic groups was applied to the data. The analysis focused on bilingual and unilingual anglophones and francophones who worked full-time throughout 1985.

The findings indicate that bilingual workers in Montreal and Ottawa-Hull earned somewhat more than unilingual workers, after accounting for differences related to age, sex, education, occupation and industry. But it should be stressed that

many other factors could have an impact on the earnings of workers. In other words, a

study of this scope cannot reflect the complexity of real life.

Notes

¹ Recent studies include Vaillancourt (1988) and Boulet and Lavallée (1983). Most studies define linguistic groups on the basis of mother tongue, which is the first language learned and still understood. In selecting home language instead, the following line of reasoning was adopted: when mother tongue and home language differ, the latter is more likely to be the one used in the workplace, the area of interest here. The validity of this hypothesis is not tested in this study.

² Since the study compares the earnings of bilingual and unilingual persons, the target population includes only employees who worked full-time throughout the year preceding the 1986 Census. This population excludes self-employed workers and unpaid family workers. An additional 3.2% of all employees in the target population were excluded owing to problems in the coding of industry, occupation or language.

³ Occupations were grouped into eight categories. These categories are determined by (1) the average weighted level of education of workers in each occupational group, based on the 1981 Census; and (2) a score related to the general training and professional requirements of each occupation (according to the Canadian Classification and Dictionary of Occupations). Readers interested in the detailed composition of each group should contact the author.

⁴ The goods-producing sector includes primary industries, manufacturing and construction. The non-government services sector refers to transportation and storage, communications and other utilities, trade, finance, insurance, real estate, business services, teaching, health care, social services, accommodation, food and beverage industries and other services. Lastly, the government services sector includes public administration and defence.

⁵ The definition of linguistic groups used in this analysis includes among francophones and anglophones persons who speak one of the two official languages at home. Persons who also speak a non-official language at home are included, as are persons whose mother tongue is neither French nor English. This definition may be considered too "broad" by some analysts of language issues. Accordingly, we redid the regression using a much narrower definition of the francophone and anglophone groups. Persons whose mother tongue did not correspond to their home language were excluded, as were all persons with multiple responses to either the mother tongue or the home language question. The regression results were comparable, with the exception of anglophone employees in Montreal. For this group, no significant difference between the earnings of bilingual and unilingual workers was observed. Another point concerning the definition of linguistic groups should be noted: the group "Both languages spoken at home" was not included in the regressions since this group includes only bilingual persons.

References

Vaillancourt, F. *Langues et disparités du statut économique au Québec, 1970 et 1980*, Conseil de la langue française, Québec, 1988.

Boulet, J.-A. and L. Lavallée. *L'évolution des disparités linguistiques des revenus de travail au Canada de 1970 à 1981*. Economic Council of Canada, document no. 245, October, 1983.

Sources

A potpourri of current information: survey news, including special surveys conducted as supplements to the Labour Force Survey; notes on research projects inside and outside Statistics Canada; recent publications and data releases; other items of news and future events.

Special Surveys

Surveys conducted during the second quarter of 1989.

■ April 1989 Survey of Consumer Finances (SCF)

The annual SCF collects information on the incomes of families and individuals for the previous calendar year. This survey is the most timely source of household income data. It provides estimates of income distributions, average incomes and earnings, low-income families and individuals, dual-earner families, lone-parent families, the elderly, etc. Five public-use microdata files are available as are the following annual publications: *Income Distribution by Size* (13-207); *Earnings of Men and Women* (13-217); *Family Income: Census Families* (13-208); *Income After Tax Distributions by Size in Canada* (13-210); and *Household Facilities by Income and Other Characteristics* (13-218).

The SCF was first carried out in the early 1950s, and has been conducted annually since 1972.

Contact: Kevin Bishop (613) 951-2211.

■ May 1989 Household Facilities and Equipment Survey (HFE)

The HFE Survey, conducted annually since 1953, provides information on physical standards of living in Canada. The survey covers housing items such as the number of rooms, type of heating equipment and fuel, and age of dwelling. As well, major household items, appliances, telephones, TVs and VCRs are identified. Information is also collected on the number of vehicles and various items of recreational equipment owned by household members. The HFE data are published in *Household Facilities and Equipment* (64-202).

The HFE data are combined with labour force and income data to provide a comprehensive base of information for government and private sector analysts to use, for example, in meeting future housing needs and assessing trends in the demand for consumer goods. The combined data are now published annually in *Household Facilities by Income and Other Characteristics* (13-218). A public-use microdata file is also available.

Contact: Penny Barclay (613) 951-4634.

■ May 1989
Family Composition Survey

This survey examines changes in the composition of families during 1988. The questionnaire was designed to "reconstruct" the family as it existed throughout 1988 by identifying the people who joined or left the family.

The survey will identify how many families remained unchanged in their composition for all of 1988; that is, families in which there were no births, deaths, arrivals or departures during the year.

Data on family composition has added a new dimension to the analysis of family financial situations. They are principally used in conjunction with the Survey of Consumer Finances to assess the impact of changes in family composition on income estimates.

Contact: Susan Poulin (613) 951-0086.

■ May to September 1989

Student Identification Questions

One of the characteristics established for Labour Force Survey respondents is whether they are **currently** attending a school, college or university. These questions, however, do not identify students during the summer period when most of them are not attending school. Therefore in the months of May to September, supplementary questions are asked of 15 to 24 year olds:

Was ... a full-time student in march of this year?

(yes or no)

Does ... expect to be a full-time student this fall?

(yes, no or not sure)

Those who report that they were full-time students in March, and that they intend to return to school full-time in the fall, are classified as returning students. Those who attended school full-time in March but who do not intend to return full-time in the fall, or who are uncertain, are labelled as non-returning students. The remainder are non-students.

These supplementary questions were used to identify the student population in the article "Youth For Hire" in this issue of *Perspectives*.

The Student Identification Questions have been asked each year since 1977. For further information contact H  l  ne Lavoie at (613) 951-2301. ☐

Labour Force Survey Changes

The Labour Force Survey (LFS) – Canada's largest on-going household survey and a rich source of labour market and socio-demographic data – has recently undergone a number of significant changes concerning estimation procedures and publication of data:

■ As of January 1989, LFS data are weighted to population estimates benchmarked to the 1986 Census. Previously, LFS data were weighted to population estimates based on the 1981 Census. The use of 1986-based estimates means more accurate data on labour market characteristics.

■ Monthly LFS data from June 1981 to December 1988 have been re-weighted using population estimates based upon the 1986 Census. The revised annual averages are published in *Labour Force Annual Averages* (71-529, March 1989).

■ The weight assigned to each LFS respondent within a household used to vary depending on the person's age and sex. A new "integrated weighting" scheme is now in place: each individual within a household, regardless of age or sex, now carries the same weight. This change in the weighting system will be of particular value to analysts working with family data since this new weight in effect represents the "family weight". Children aged 0 to 14 years in the sample now also have weights, which further enriches the LFS family data.

■ Changes to the estimation process have also improved the data provided for 41 non-CMA urban centres – that is, large urban centres with populations under 100,000. (Urban centres with populations over 100,000 are designated as census metropolitan areas or CMAs.)

■ The monthly publications *Labour Force Information* (71-001P) and *The Labour Force* (71-001) have a new, streamlined look. After consulting data users, many modifications were made: some tables were expanded or reworked to improve the data presentation, others were dropped. The focus of these two publications has also changed. The 71-001P offers extremely timely access to information on current labour market conditions and recent trends, while the 71-001 provides a wide variety of data for a broader range of analytical needs. The 71-001 continues to inform readers about supplementary surveys administered concurrently with the Labour Force Survey, and will occasionally carry articles on technical issues – seasonal adjustment, data quality, and data processing changes, for example. With the advent of *Perspectives*, the feature articles will no longer appear in 71-001.

Changes in the Labour Force Survey are described in more detail in the January 1989 issue of *The Labour Force*. For further information on how to obtain revised LFS

data call Ken Bennett at (613) 951-4720 or H  l  ne Lavoie at (613) 951-2301. □

Labour Market Activity Survey – Newsletter Launched

The Labour Market Activity Survey (LMAS), sponsored by Employment and Immigration Canada, was first conducted by Statistics Canada in January 1987. As the name suggests, this unique survey gathered a wealth of information on the activities of Canadians in the labour market throughout 1986, and on characteristics of jobs they held. Respondents were interviewed again in 1988, providing a full two years of data on the same individuals.

The total number of jobs held by each respondent was identified and detailed information was collected on the first five jobs held during the calendar year.

For each job reported, the LMAS collected data on the following:

- industry
- occupation
- class of worker (paid employment, self-employment or unpaid family work)
- start date of the most recent period of employment
- date last worked at the job, if applicable
- start and end date of any unpaid absences from each job in the year, if applicable

For all paid worker jobs, the following data were collected:

- the usual work schedule (hours/day, days/week, weeks/month)

- the usual wage or salary
- union membership or collective agreement coverage
- private pension plan coverage
- firm size

The LMAS combines the detailed information about the characteristics of jobs held during periods of employment with the nature and extent of job search activity during periods not working (that is, unemployment) to derive a labour force status, week by week, for the full year.

For further information on the LMAS, including details of forthcoming publications, data sets and current research, a quarterly *Labour Market Activity Survey Bulletin* is available, free of charge, from: The Editor, LMAS Bulletin, Statistics Canada, 5-D Jean Talon Bldg., Ottawa, Ontario K1A 0T6.

Further information on this data source may also be obtained by contacting Richard Veevers at (613) 951-4617 or T. Scott Murray at (613) 951-9476. □

A Look at Employee Benefits, Family Responsibilities and the Workplace

At the Conference Board of Canada, work is well underway on a major research project titled, "Canadian Work Environments and Changing Family Structures". The project addresses the needs of workers with family responsibilities (that is, responsibilities for home maintenance and care of dependents, be they children, elderly persons, disabled or infirm family members). The issue has been approached from three perspectives:

- first, a 1988 survey of 1,600 Canadian public and private sector employers looked

Something off the beaten track for researchers ...

The Special Surveys Program at Statistics Canada offers you a wealth of household survey data to study current social and economic issues.

Recent survey topics include:

volunteers in Canada

the labour market experiences of recent graduates

attitudes towards drinking and driving

the use of alcohol and drugs

the value of wildlife to Canadians

Canada's veterans

Data from these and many more special surveys are available as microdata files, offering maximum flexibility for specialized research.

For your convenience, custom tabulations are also available – produced to your specifications and delivered on paper, tape or diskette.

Want to know more? Contact:

T. Scott Murray at (613) 951-9476

at benefits, policies and practices in place to assist employees in balancing work and family-related demands;

- second, a survey of over 10,000 employees will examine the extent to which family responsibilities affect employees in terms of absences from work, and the

perceived impact of family responsibilities on career or job advancement;

■ third, in-depth interviews with Canadian union leaders will ascertain the unions' position on leave benefits and policies.

Initial findings from the employer survey will be published in a report in 1989. Research on the second and third perspectives is ongoing and will continue through the summer and fall of 1989. Long-term plans propose a data base on this important subject, updated every two years.

For further information contact:
Judy MacBride-King
The Conference Board of Canada
Compensation Research Centre
255 Smyth Road,
Ottawa, Ontario, K1H 8M7
Tel: (613) 526-3280
Fax: (613) 526-4857



Volunteer Survey Data

■ Between November 1, 1986 and October 31, 1987 over five million adult Canadians volunteered their time and skill to groups and organizations across the country. These people accounted for 27% of the total population aged 15 and over.

■ The incidence of "formal" volunteering varied by province, from a high of 40% to a low of 19%. Albertans were the most active "formal" volunteers.

■ Almost half (45%) of all "formal" volunteers were men.

A Survey of Volunteer Activity, conducted in October 1987 by Statistics Canada on behalf of the Secretary of State, profiled volunteer workers in Canada and documented the extent and nature of their voluntary activities. The survey used two

questionnaires. The first, administered to about 70,000 individuals, identified those who had volunteered "formally" – that is, through an organization or agency – and "informally" on their own, in the 12-month period from November 1986 to October 1987. A follow-up questionnaire obtained details on the experiences and activities of formal volunteers.

Highlights from the first questionnaire were released in May 1988.

Statistics Canada is preparing an overview of the survey results which will be released this summer. Microdata files with supporting documentation are now available at a cost of \$500. Special tabulations may also be requested on a cost recovery basis. In addition, the Secretary of State plans to release a series of short profiles on the characteristics of particular groups of Canadian volunteers.

For further information on published material and data contact T. Scott Murray at (613) 951-9476 or Doreen Duchesne at (613) 951-6893.



Employee Training in Private Industry

The Human Resource Training and Development Survey (HRTD) is a one-time survey, sponsored by Employment and Immigration Canada. It was designed to collect information on employee training supported or provided by employers in private industry. The information will establish a benchmark for further studies in the area of training. It will also assist the federal government in identifying future policy directions.

The survey was conducted in the spring of 1988. A preliminary data release noted that employers spent an estimated \$1.39 billion on employee training in 1986/87. Further preliminary results from the survey are expected in June 1989.

For more information contact Doug Higgins, Education, Culture and Tourism Division, Statistics Canada, at (613) 951-5870. □

Reprint Series of Feature Articles in The Labour Force*

For the past few years, *The Labour Force* (71-001) has regularly published feature articles on labour market topics. With the advent of *Perspectives on Labour and Income*, the feature section of *The Labour Force* has been discontinued. However, many of the feature articles have lasting value and the most popular ones are available as reprints. In a few cases, articles on related issues have been brought together in one report.

No. 1 – Long Weeks, Short Weeks

These three articles (May 1985, January 1986 and September 1986) examine the extremes in workweeks. One explores the recent growth of long workweeks, highlighting the characteristics of people working 50 or more hours a week. The second focuses on employees with long workweeks, leaving aside the self-employed who have traditionally put in long weeks. The third looks at people working one to five hours a week and weighs their impact on employment estimates.

No. 2 – Previous Work Experience of the Unemployed

Although many people who lose a job immediately begin searching for another, not all unemployed fit this pattern. Some leave their job by choice to find a better or more suitable one while others are returning to the labour force after an absence that could range from one month to several years. Still others are looking for their first job. Seasonal and demographic differences in the work antecedents of unemployed persons are

set out in these two articles (December 1984, June 1985).

No. 3 – The Labour Force Participation of Canada's Immigrants

Using 1981 Census data, this report (September 1985) describes the characteristics and the labour force activities of immigrant groups. Differences in labour market patterns are examined according to place of birth and period of immigration to Canada.

No. 4 – Long-term Unemployment

These two studies (October 1985, June 1986) were prompted by the dramatic increase in long-term unemployment in the 1980s. The October article focuses on the long-term unemployed by age, sex and region. The June article examines the long-term unemployed by industry and occupation of their last job.

No. 5 – Hourly Earnings in 1984

Based on the 1984 Survey of Union Membership, this article (December 1985) looks at hourly earnings by sex and education and provides valuable information for studies on minimum wage and disparities in earnings.

No. 6 – An Overview of Employment Growth in the Services to Business Management Sector

Services to business management are an expanding industry, supporting the popular notion that the practice of "contracting out" is on the rise. The report (February 1986) profiles workers in this industry.

No. 7 – Labour Market Activity of Students During the Summer Vacation: July 1986

Students' prospects in the summer job market improved in 1986. Labour market conditions generally were favourable, and a declining youth population meant that fewer students were competing for available jobs. This article (July 1986) outlines the labour market experiences of students during the different phases of the latest economic cycle.

* Compiled by Bruce Simpson, publications officer, (613) 951-4628.

No. 8 – Labour Market Activities of High Income Families

Using 1981 Census data, this article (August 1986) examines the labour market characteristics of the families that formed the top income percentile in 1980. Comparisons of participation rates, class of worker and occupation of selected family members are made with all Canadian families.

No. 9 – Occupational Trends Among Women in Canada: 1976 to 1985

The past decade has seen tremendous growth in female employment, accompanied by changes in the occupational profile of women. An examination (October 1986) of this changing occupational mix shows where part-time employment growth has occurred and which occupations are "aging", in the sense that their proportion of young jobholders is falling.

No. 10 – Recent Industry Trends in Employment: Canada and the Provinces

The swing towards the service sector in the 1980s, and labour market disruptions brought about by the recession hit the provinces at different times and to differing degrees. This study (November 1986) is a careful examination of industry changes in every province during the turbulent 1980-1985 period.

No. 11 – "Involuntary" Part-time Employment in Canada, 1975-1985

People who did not want to work part-time accounted for over 50% of the growth in part-time employment in the ten-year period ending in 1985. This article (December 1986) draws a profile of the involuntary part-time worker.

No. 12 – Alternative Concepts and Measures of Unemployment

Statistics Canada occasionally publishes a range of unemployment rates to supplement the official unemployment rate. This article (February 1987) looks at the theoretical basis of these alternative rates, and at how

much they differed from the official rate over the years 1977 to 1986.

No. 13 – Job Loss and Labour Market Adjustment in the Canadian Economy

This is an in-depth study (March 1987) of workers who suffered permanent job loss in the early 1980s. It is based on the results of the Displaced Worker Survey conducted in January 1986. Efforts to find new work, and their outcome, are detailed. The impact on wages is highlighted.

No. 14 – Persons On the Margins of the Labour Force

Some people who are not part of the labour force do in fact want to work. This report (April 1987) analyses their reasons for not seeking work, tracking changes in the size and composition of this group through the last two business cycles.

No. 15 – The Growth of Part-time Work in a Changing Industrial Environment

Part of the growth in the proportion of workers employed part-time can be explained by the shift from the goods-producing industries to the service sector, which has traditionally employed a higher proportion of part-time workers. This article (May 1987) analyses this influence and shows how the root causes of part-time employment growth have changed since the end of the recession.

No. 16 – Employment Estimates from the Labour Force Survey and the Survey of Employment, Payrolls and Hours

Every month Statistics Canada publishes employment data from two surveys, the household-based Labour Force Survey and the establishment-based Survey of Employment, Payrolls and Hours. Although the two complement each other, they yield substantially different employment counts. This article (June 1987) explains why such differences exist by looking at each survey's concepts, coverage and other factors.

No. 17 – A Review of Employment and Earnings Data, 1983-1986

This article (August 1987) draws on data from the Survey of Employment, Payrolls and Hours for the critical post-recession period of 1983 to 1986. It analyses the extent of recovery by industry and province using employment, average weekly earnings and hours of work data.

No. 18 – Trends in Government Employment, 1976-1986

Government employment over the decade has grown less than employment in the private sector. In addition to examining growth at the federal, provincial and local levels of government, the study (September 1987) looks at the composition of government work force by age, sex and educational attainment.

No. 19 – Job Search Methods of the Unemployed, 1977-1986

People use a variety of job search methods, but contacting employers directly has traditionally been the most common means. However, some methods have become more popular over the past decade, others less so. This report (October 1987) explores changing job search patterns, comparing the sexes and different age groups and tracing differences by duration of unemployment.

No. 20 – Older Workers in the Canadian Labour Market

Since the recession, older workers have faced harder times in the labour market. This article (November 1987) provides a labour market profile of Canadians aged 55 to 64 including their labour force participation rates, annual work patterns and the types of jobs they hold or desire.

No. 21 – Work Injuries in Canada, 1982 to 1986

Work-related injuries and illnesses are costly to the Canadian economy (\$13.5 billion in 1985 according to Labour Canada). This study (March 1988) is the first of three on absenteeism. It examines patterns in the rate, cause and type of injuries among

workers and pinpoints differences by age, sex, industry and occupation.

No. 22 – Work Absences and Compensation, 1979-1986

In 1986, nearly one million people were absent from their jobs for at least two consecutive weeks because of illness, accident or pregnancy. Over 80% of these people received some form of compensation. This article (April 1988) reviews the 1979 to 1986 results from the Absence from Work Survey, examining the incidence of absence and the types of compensation received by sex, age and province.

No. 23 – Time Loss from Work for Personal Reasons

In an average week of 1987, nearly half a million full-time employees were absent from work for all or part of the week for personal reasons, that is, illnesses, and personal or family responsibilities. This article (May 1988) looks at changes in the level of personal absences and the resulting time loss over the past decade. Differences by industry, occupation and selected demographic characteristics are highlighted.

No. 24 – The Labour Market in the '80s: Canada and the United States

There were pronounced differences in labour market trends between Canada and the United States in the 1980s. This article (June 1988) reviews the performance of the labour market in Canada and the United States from 1980 to 1987. Topics examined include labour force participation rates and employment levels by age and sex, part-time and industry employment and long-term unemployment.

No. 25 – Trends in Labour Income

Average labour income rose by 140% between 1975 and 1987. But after adjusting for inflation, the increase was only 1.5%. This article (September 1988) reviews the gains in recent years in the wages and salaries and supplementary labour income of paid workers. Labour income growth is

examined by province and industry, and compared with the pace of inflation over the past 13 years. Concepts, definitions and measurement issues related to labour income are also discussed.

How to order

These reprints can be obtained by contacting the Statistical Reference Centre at (613) 951-2800, Statistics Canada, R.H. Coats Building, Ottawa K1A 0T6. Presented in bilingual format, with an attractive and sturdy window cover, each reprint costs \$6. These articles are also available from Regional Reference Centres. Or, you may use the service of the toll-free number (1-800-267-6677).

1986 CENSUS PROFILES:

YOUR TICKET TO ANY COMMUNITY IN CANADA

The 1986 Profiles will put you on the fast track to any Canadian community you want to study. . .

You're looking for a fast introduction to the social and demographic realities of a city, a town, a municipality or an entire province. And you don't have the time to wade through piles of statistics.

Focus in on the area of your choice with a CENSUS PROFILE. Each PROFILE features more than 120 items of information on the area that interests you . . . from population counts, to the living arrangements of its elderly.

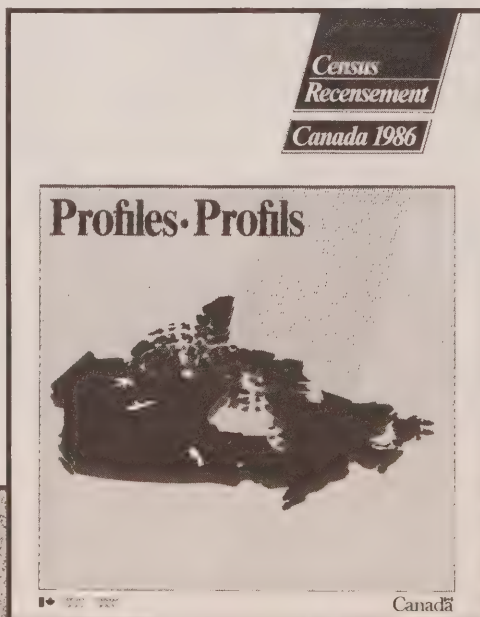
Choose a PROFILE on any one of

- 6009 Census Sub divisions (municipalities)
- 266 Census Divisions (counties)
- 295 Federal Electoral Districts
- 25 Census Metropolitan Areas
- 114 Census Agglomerations
- a variety of urban/rural breakdowns
- and, more.

With 52 publications in this series, we can fast track you to any destination you want.

For more information, call us at 1-800-267-6677 and request the Census brochure (which includes ordering information), or write us at:

**Publications Sales
Statistics Canada
Ottawa, Ontario
K1A 0T6**



Key Labour and Income Facts

The following selection of labour and income indicators is drawn from 11 sources and includes published and unpublished annual data. The first 50 indicators appear in every issue and the remainder address a different topic each time.

The latest available annual data are always shown; as results become available, the indicators are updated so that every issue contains new data. An indicator updated since the last issue is "flagged" with an asterisk.

Data Sources

The indicators are derived from the following sources:

- | | |
|-----------|---|
| 1-11 & 15 | Labour Force Survey
Frequency: Monthly
Contact: Ken Bennett (613) 951-4720 |
| 12-14 | Labour Market Activity Survey
Frequency: Annual
Contact: Richard Veevers (613) 951-4617 |
| 16 | Absence from Work Survey
Frequency: Annual
Contact: Denis Lefebvre (613) 951-4600 |
| 17 | Workers' Compensation Statistics
Frequency: Annual
Contact: Joanne Proulx (613) 951-4040 |
| 18 | Help-wanted Index
Frequency: Monthly
Contact: Jean-Pierre Maynard (613) 951-4045 |
| 19-21 | Unemployment Insurance Statistics
Frequency: Monthly
Contact: Jean-Pierre Maynard (613) 951-4045 |

- | | |
|-------|---|
| 22-29 | Survey of Employment, Payrolls and Hours
Frequency: Monthly
Contact: Howard Krebs (613) 951-4063 |
| 30-32 | Labour Income (Revenue Canada Taxation-based statistics)
Frequency: Quarterly
Contact: Ed Bunko (613) 951-4048 |
| 33-43 | Survey of Consumer Finances
Frequency: Annual
Contact: Kevin Bishop (613) 951-2211 |
| 44-50 | Household Facilities and Equipment Survey
Frequency: Annual
Contact: Penny Barclay (613) 951-4634 |
| 51-52 | Family Expenditure Survey
Frequency: Annual
Contact: Harry Champion (613) 951-4645 |

Notes on the method of deriving certain indicators are given at the end of the table.

Additional Data

The table provides at most two years of data for each indicator. A longer time series (generally 10 years) for this set of indicators can be obtained on paper or diskette at a cost of \$50. (A more extensive explanation of the indicators is also available.) This 10-year data set will be updated annually in April. Contact: Suzanne Carisse (613) 951-4627.

Key Labour and Income Facts

No.		Unit	Year	Canada	Nfld.	P.E.I.	N.S.	N.B.
Labour Market								
1	Labour force	'000	1987	13,011	223	60	399	312
			1988	13,275	231	62	408	318
	Change	%		2.0	3.6	3.0	2.2	1.9
2	Participation rate	%	1987	66.2	53.2	62.9	59.9	58.2
			1988	66.7	54.6	64.0	60.8	58.8
3	Employed	'000	1987	11,861	183	52	350	272
			1988	12,245	193	54	366	280
	Change	%		3.2	5.5	3.2	4.6	3.2
4	Proportion of employed working part-time	%	1987	15.2	10.8	15.1	16.1	15.0
			1988	15.4	11.2	15.0	15.5	15.4
5	Proportion of part-timers wanting full-time work	%	1987	26.5	60.7	34.8	38.2	40.6
			1988	23.7	58.8	34.5	35.5	36.4
6	Unemployed	'000	1987	1,150	40	8	49	41
			1988	1,031	38	8	42	38
	Change	%		-10.4	-5.1	1.3	-15.0	-6.6
7	Official unemployment rate	%	1987	8.8	17.9	13.2	12.3	13.1
			1988	7.8	16.4	13.0	10.2	12.0
Alternative Measures of Unemployment								
8	Unemployed 14 or more weeks as a proportion of labour force	%	1987	3.8	8.2	5.4	5.4	5.6
			1988	3.1	7.7	5.2	4.2	4.8
9	Unemployment rate:							
-	of persons heading families with children under age 16	%	1987	7.5	16.2	--	10.5	--
			1988	5.8	12.5	--	--	10.3
-	excluding full-time students	%	1987	8.6	17.8	13.5	12.2	13.0
			1988	7.6	16.6	13.3	10.0	11.9
-	including full-time members of the Canadian Armed Forces	%	1987	8.8	--	--	11.9	12.9
			1988	7.7	--	--	9.9	11.8
-	of full-time labour force	%	1987	10.6	20.6	--	15.1	15.9
			1988	9.4	19.3	--	12.7	14.6
-	of part-time labour force	%	1987	11.5	21.2	--	14.1	13.9
			1988	9.8	17.1	--	12.8	13.2
-	including persons on the margins of the labour force	%	1987	9.7	22.1	--	13.4	15.5
			1988	8.5	20.2	--	11.1	14.0
10	Underutilization rate based on hours lost through unemployment and underemployment	%	1987	11.1	21.6	--	15.7	16.6
			1988	9.9	20.1	--	13.4	15.2
11	Proportion unemployed 6 months or longer	%	1987	23.5	24.5	--	22.8	22.5
			1988	20.2	23.9	--	21.0	19.9

See notes at end of table.

Key Labour and Income Facts

Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Year	Unit	No.
3,253	4,992	531	489	1,268	1,482	..	..	1987	'000	1
3,311	5,118	535	488	1,290	1,514	..	..	1988	%	
1.8	2.5	0.7	-0.3	1.7	2.2	..	..	
63.3	69.0	66.5	66.4	72.0	65.6	..	..	1987	%	2
64.0	69.6	66.7	66.4	72.4	65.7	..	..	1988		
2,918	4,689	492	453	1,147	1,306	..	..	1987	'000	3
3,001	4,862	494	451	1,187	1,358	..	..	1988	%	
2.8	3.7	0.3	-0.5	3.5	4.0	..	..	
13.5	15.2	16.9	16.9	15.5	17.9	..	..	1987	%	4
13.6	15.6	16.9	17.1	15.5	17.9	..	..	1988		
34.5	17.8	23.4	26.7	25.0	33.7	..	..	1987	%	5
32.6	15.3	21.7	26.5	20.4	28.6	..	..	1988		
335	304	39	36	122	177	..	..	1987	'000	6
311	256	42	37	103	157	..	..	1988	%	
-7.2	-15.7	6.5	1.9	-15.5	-11.3	..	..	
10.3	6.1	7.4	7.4	9.6	11.9	..	..	1987	%	7
9.4	5.0	7.8	7.5	8.0	10.3	..	..	1988		
5.1	2.2	2.7	3.0	3.9	5.4	..	..	1987	%	8
4.4	1.5	2.9	3.1	3.0	4.4	..	..	1988		
9.5	5.4	--	--	7.7	8.9	..	..	1987	%	9
7.4	3.2	--	--	6.0	7.9	..	..	1988		
10.2	5.8	7.1	7.1	9.3	11.8	..	..	1987	%	
9.3	4.7	7.5	7.4	7.8	10.3	..	..	1988		
10.3	6.1	7.3	--	9.5	11.8	..	..	1987	%	
9.4	5.0	7.7	--	7.9	10.3	..	..	1988		
12.5	6.9	9.1	9.4	11.1	14.6	..	..	1987	%	
11.5	5.8	9.2	9.6	9.2	12.8	..	..	1988		
11.2	10.3	9.9	9.6	13.3	14.5	..	..	1987	%	
10.6	8.2	10.9	9.4	11.2	11.2	..	..	1988		
11.9	6.4	7.9	7.8	10.0	12.5	..	..	1987	%	
10.6	5.3	8.3	8.0	8.3	10.8	..	..	1988		
12.8	7.5	9.6	10.1	11.8	15.3	..	..	1987	%	10
11.9	6.3	9.9	10.2	9.8	13.3	..	..	1988		
30.5	16.7	18.1	19.8	20.6	26.6	..	..	1987	%	11
25.7	12.7	16.6	20.8	19.0	22.0	..	..	1988		

See notes at end of table.

Key Labour and Income Facts

No.		Unit	Year	Canada	Nfld.	P.E.I.	N.S.	N.B.
Other Labour Market Indicators								
12	Employed at some time in year, male, age 16 to 69	'000	1986	7,560	151	36	235	191
	– as proportion of male population age 16 to 69	%		87.4	80.7	87.8	82.7	82.0
	Employed at some time in year, female, age 16 to 69	'000	1986	5,987	109	29	187	149
	– as proportion of female population age 16 to 69	%		67.4	58.0	69.0	62.1	61.8
13	Unemployed at some time in year, male, age 16 to 69	'000	1986	1,601	63	11	63	56
	– as proportion of male population age 16 to 69	%		18.5	33.7	26.8	22.2	24.0
	Unemployed at some time in year, female, age 16 to 69	'000	1986	1,441	45	9	58	46
	– as proportion of female population age 16 to 69	%		16.2	23.9	21.4	19.3	19.1
14	Full-time, full-year male paid workers	'000	1986	4,039	53	14	117	90
	Full-time, full-year female paid workers	'000	1986	2,468	35	10	71	53
15	Days lost per worker per year through illness or for personal reasons		1987	8.6	8.9	--	7.4	8.3
			1988	9.2	9.1	--	8.6	8.7
16	Proportion of paid workers absent two or more consecutive weeks because of illness or accident	%	1986	6.3	3.5	4.7	5.1	7.0
			1987	6.3	4.4	5.1	6.1	6.4
17	Workers receiving workers' com- pensation for time-loss injuries	'000	1986	587	9	2	13	10
	Change	%	1987	603	9	2	12	11
				2.7	4.9	6.9	-7.0	10.2
18	Help-wanted index (1981 = 100)		1987	134	157			
			1988	150	176			
Unemployment Insurance								
19	Total beneficiaries	'000	1986	1,095	67	13	53	58
	Change	%	1987	1,033	68	13	51	57
				-5.7	0.5	-2.5	-3.4	-1.3
20	Total beneficiaries as a proportion of contributors	%	1986	9.0	29.3	23.0	13.7	18.7
			1987	8.2	29.4	22.0	13.0	17.9
21	Regular beneficiaries without reported earnings	'000	1986	857	54	10	41	47
	Change	%	1987	800	55	10	40	46
				-6.6	1.9	-2.3	-3.2	-1.4

See notes at end of table.

Key Labour and Income Facts

Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Year	Unit	No.
1,928	2,850	306	289	733	843	..	..	1986	'000	12
84.5	90.0	89.0	90.0	90.4	85.6	..	..		%
1,434	2,331	256	229	601	661	..	..	1986	'000	
60.6	71.4	72.1	71.6	74.9	65.8	..	..		%
459	457	58	50	167	217	..	..	1986	'000	13
20.1	14.4	13.8	13.7	17.3	19.1	..	..		%
377	482	49	44	139	192	..	..	1986	'000	
15.9	14.8	13.8	13.7	17.3	19.1	..	..		%
1,013	1,682	154	130	370	416	..	..	1986	'000	14
632	998	109	80	237	242	..	..	1986	'000	
9.8	8.6	8.4	7.1	7.0	8.0	..	..	1987		15
9.5	9.7	9.7	7.5	8.3	7.7	..	..	1988		
7.4	5.8	5.7	5.2	6.0	6.6	..	..	1986	%	16
7.4	6.1	6.0	4.0	5.9	6.2	..	..	1987		
213	196	23	16	42	62	..	1	1986	'000	17
217	205	23	16	41	66	..	1	1987		
1.6	4.8	-4.2	-1.3	-2.4	7.3	..	17.4		%	
154	166	68			79	..	..	1987		18
173	180	80			95	..	..	1988		
338	261	34	29	95	144	2	2	1986	'000	19
316	231	33	29	90	142	2	2	1987		
-6.6	-11.5	-1.5	-0.2	-5.3	-1.5	2.4	7.3		%	
11.3	5.4	7.0	7.8	8.1	11.0	11.0	4.9	1986	%	20
10.2	4.6	6.8	7.8	7.7	10.6	10.5	5.4	1987		
271	194	26	23	75	114	1	1	1986	'000	21
252	166	25	22	70	111	1	1	1987		
-7.0	-14.1	-2.6	-1.9	-7.1	-2.7	1.4	7.5		%	

See notes at end of table.

Key Labour and Income Facts

No.		Unit	Year	Canada	Nfld.	P.E.I.	N.S.	N.B.
Earnings (including Overtime) and Hours								
22	Average weekly earnings in current dollars Change	\$	1987	442.74	423.64	362.07	400.02	407.39
			1988	463.80	443.99	379.26	417.92	421.15
		%		4.8	4.8	4.7	4.5	3.4
23	Average weekly earnings in 1981 dollars Change	\$	1987	320.36	313.34	275.34	295.22	298.89
			1988	322.53	320.57	278.05	298.09	298.26
		%		0.7	2.3	1.0	1.0	-0.2
24	Average weekly earnings of salaried employees in current dollars Change	\$	1987	542.06	497.27	460.15	497.27	500.92
			1988	568.10	524.26	493.20	516.66	523.26
		%		4.8	5.4	7.2	3.9	4.5
25	Average weekly earnings of salaried employees in 1981 dollars Change	\$	1987	392.23	367.80	349.92	366.99	367.51
			1988	395.06	378.53	361.58	368.52	370.58
		%		0.7	2.9	3.3	0.4	0.8
26	Average weekly earnings of hourly paid employees in current dollars Change	\$	1987	353.34	338.48	240.59	315.52	331.19
			1988	370.45	353.66	256.22	330.64	342.13
		%		4.8	4.5	6.5	4.8	3.3
27	Average weekly earnings of hourly paid employees in 1981 dollars Change	\$	1987	255.67	250.36	182.96	232.86	242.99
			1988	257.61	255.35	187.84	235.83	242.30
		%		0.8	2.0	2.7	1.3	-0.3
28	Average weekly hours of hourly paid employees	hrs	1987	32.0	35.2	32.2	32.8	33.8
			1988	32.1	35.5	32.6	33.0	34.0
29	Average weekly overtime hours of hourly paid employees	hrs	1987	1.1	1.4	0.4	0.7	0.8
			1988	1.1	1.7	0.5	0.7	0.9
Labour Income								
30	Labour income in current dollars Change	\$ million	1987	292.5	3.8	0.8	7.2	5.6
			1988	316.3	4.1	0.9	7.8	6.0
		%		8.1	7.6	7.5	7.2	7.2
31	Labour income per employee in current dollars Change	\$	1987	28,200	24,300	20,100	23,600	23,200
			1988	29,500	24,300	20,900	24,100	24,000
		%		4.6	0.2	4.0	2.5	3.6
32	Labour income per employee in 1981 dollars Change	\$	1987	20,400	17,900	15,300	17,400	17,000
			1988	20,500	17,600	15,300	17,200	17,000
		%		0.6	-2.1	0.3	-1.2	-0.0
33	Net income from self-employment as a proportion of money income	%	1986	6.0	5.7	8.6	6.2	5.4
			1987	6.7	4.9	12.4	6.6	4.3

See notes at end of table.

Key Labour and Income Facts

Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Year	Unit	No.
430.88	456.35	407.85	406.00	450.28	453.42	513.29	609.53	1987	\$	22
454.01	482.68	422.05	411.30	462.76	466.52	556.24	621.17	1988	%	
5.4	5.8	3.5	1.3	2.8	2.9	8.4	1.9			
308.21	324.11	299.01	300.96	338.30	342.20	..	..	1987	\$	23
313.11	327.46	297.01	291.91	338.27	339.78	..	..	1988	%	
1.6	1.0	-0.7	-3.0	-0.0	-0.7	..	..	
515.73	563.40	509.43	523.70	564.86	544.62	599.58	692.29	1987	\$	24
540.82	595.71	536.17	527.58	585.04	564.90	666.78	695.96	1988	%	
4.9	5.7	5.2	0.7	3.6	3.7	11.2	0.5			
368.91	400.14	373.48	388.21	424.39	411.03	..	..	1987	\$	25
372.98	404.15	377.32	374.44	427.66	411.43	..	..	1988	%	
1.1	1.0	1.0	-3.5	0.8	0.1	..	..	
352.68	365.11	312.89	295.96	327.68	374.10	405.32	484.96	1987	\$	26
372.12	384.77	321.24	301.31	340.60	390.19	437.86	521.54	1988	%	
5.5	5.4	2.7	1.8	3.9	4.3	8.0	7.5			
252.27	259.31	229.39	219.39	246.19	282.34	..	..	1987	\$	27
256.63	261.04	226.07	213.85	248.98	284.19	..	..	1988	%	
1.7	0.7	-1.4	-2.5	1.1	0.7	..	..	
32.9	32.4	31.1	28.8	30.4	30.0	31.8	33.7	1987	hrs	28
32.8	32.5	30.7	28.7	30.8	30.2	32.9	33.3	1988		
0.9	1.2	0.9	0.7	1.2	0.8	2.8	3.6	1987	hrs	29
1.0	1.3	0.8	0.8	1.4	0.9	2.8	4.9	1988		
72.0	124.6	10.9	8.2	26.8	31.3	1.1		1987	\$ million	30
78.1	135.9	11.5	8.6	28.7	33.5	1.2		1988		
8.5	9.0	5.8	4.3	7.0	7.0	8.6			%	
27,900	29,800	26,300	24,300	27,100	27,700	..	..	1987	\$	31
29,400	31,400	27,600	24,900	28,400	28,300	..	..	1988	%	
5.1	5.3	4.8	2.6	4.7	2.4	..	..	
20,000	21,200	19,300	18,000	20,400	20,900	..	..	1987	\$	32
20,300	21,300	19,400	17,700	20,700	20,600	..	..	1988	%	
1.4	0.6	0.6	-1.8	1.8	-1.2	..	..	
5.2	5.7	6.9	12.3	5.7	6.6	..	..	1986	%	33
5.8	6.2	7.6	13.4	7.9	7.3	..	..	1987		

See notes at end of table.

Key Labour and Income Facts

No.		Unit	Year	Canada	Nfld.	P.E.I.	N.S.	N.B.
Earnings of Full-time, Full-year Workers								
34	Average earnings of men working full-time, full-year	\$	1986	30,200	25,500	24,100	28,700	27,000
			1987	31,900	27,800	25,200	30,300	27,600
	Change	%		5.6	8.8	4.8	5.8	2.3
35	Average earnings of women working full-time, full-year	\$	1986	19,900	16,800	17,200	18,100	17,400
			1987	21,000	17,900	17,900	18,500	18,100
	Change	%		5.8	6.2	3.9	2.3	4.3
36	Ratio of female to male earnings	%	1986	65.8	66.1	71.7	63.1	64.3
			1987	65.9	64.5	71.1	61.0	65.6
Family Income								
37	Average family income	\$	1986	41,200	30,400	32,000	35,400	33,300
			1987	43,600	33,700	34,800	38,100	35,200
38	Median family income	\$	1986	36,900	26,400	28,100	30,700	30,200
			1987	38,900	29,800	30,900	34,300	31,800
39	Average income of unattached individuals	\$	1986	17,600	12,100	13,200	15,400	15,100
			1987	18,700	14,600	13,800	15,900	13,700
40	Median income of unattached individuals	\$	1986	13,300	9,200	9,500	11,900	11,000
			1987	14,400	10,000	10,600	11,600	10,500
41	Proportion below the low-income cutoff (1978 base):							
	Families	%	1986	11.8	20.4	9.2	14.0	13.5
			1987	11.3	18.9	10.0	11.7	14.4
	Unattached individuals	%	1986	34.6	48.3	42.0	36.5	39.0
			1987	33.5	45.3	32.9	37.7	45.6
	Persons (Population)	%	1986	14.5	22.1	13.2	16.2	15.8
			1987	14.1	20.8	12.9	14.7	16.9
	Children (less than 16 years)	%	1986	17.0	25.7	14.9	19.3	18.8
			1987	16.9	25.9	16.1	16.8	20.5
	Elderly (65 years and over)	%	1986	18.9	21.9	18.4	18.3	17.4
			1987	17.3	20.4	12.3	15.8	18.2
42	Average family taxes	\$	1986	5,800	3,800	3,700	4,600	4,100
			1987	6,600	4,600	4,100	5,400	4,600
43	Average family income after tax	\$	1986	27,900	23,100	23,700	24,900	24,400
			1987	29,400	25,700	24,600	26,300	25,200

See notes at end of table.

Key Labour and Income Facts

Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Year	Unit	No.
28,100	32,100	26,200	25,700	31,300	31,700	..	..	1986	\$	34
30,700	33,600	27,900	27,000	32,000	32,900	..	..	1987		
9.2	4.8	6.7	5.1	2.2	3.7	..	..		%
19,500	20,700	18,300	17,600	20,100	20,000	..	..	1986	\$	35
20,500	22,000	19,200	17,900	20,800	21,900	..	..	1987		
5.4	6.1	4.6	1.9	3.8	9.6	..	..		%
69.2	64.6	70.0	68.4	64.1	63.2	..	..	1986	%	36
66.8	65.4	68.6	66.3	65.1	66.7	..	..	1987		
38,100	45,800	37,900	37,000	43,700	40,600	..	..	1986	\$	37
40,100	49,000	39,700	39,100	44,400	42,600	..	..	1987		
34,100	41,100	33,300	32,200	39,300	36,900	..	..	1986	\$	38
35,500	43,800	35,800	35,100	40,000	38,000	..	..	1987		
15,300	18,900	18,000	16,200	18,800	19,100	..	..	1986	\$	39
17,100	20,700	16,900	16,600	19,200	18,900	..	..	1987		
11,200	14,700	14,600	11,900	14,500	14,700	..	..	1986	\$	40
12,600	16,200	12,500	12,900	15,000	15,900	..	..	1987		
										41
14.6	8.5	13.0	15.5	10.1	13.2	..	..	1986	%	
13.9	7.8	11.9	12.4	12.7	13.0	..	..	1987		
44.6	28.8	29.1	33.7	31.5	32.9	..	..	1986	%	
40.7	28.5	35.9	33.4	31.5	31.2	..	..	1987		
17.6	10.6	16.3	19.2	13.1	16.5	..	..	1986	%	
16.8	10.3	15.9	15.9	15.6	15.7	..	..	1987		
18.6	12.9	21.9	24.9	14.8	19.9	..	..	1986	%	
19.0	12.3	21.9	18.9	19.9	18.6	..	..	1987		
26.7	13.8	17.0	17.7	16.1	21.5	..	..	1986	%	
25.2	12.7	15.4	13.9	13.8	19.9	..	..	1987		
5,500	6,700	4,700	4,700	5,800	5,500	..	..	1986	\$	42
6,400	7,500	5,400	5,300	6,800	6,100	..	..	1987		
25,600	30,600	25,900	25,100	29,600	27,500	..	..	1986	\$	43
27,000	32,800	27,100	26,800	29,600	27,900	..	..	1987		

See notes at end of table.

Key Labour and Income Facts

No.		Unit	Year	Canada	Nfld.	P.E.I.	N.S.	N.B.
Households and Dwellings								
44	Average household income	\$	1986 1987	35,700 38,500	28,100 31,700	28,700 31,300	31,500 34,100	30,100 31,900
45	Proportion of households with:							
	VCRs	%	1987 1988	45.2 52.0	45.4 50.0	34.9 43.2	44.7 51.8	43.2 51.3
	Microwaves	%	1987 1988	43.3 53.8	22.1 34.3	34.9 45.5	35.5 48.5	32.9 48.3
	Two vehicles	%	1987 1988	29.1 29.3	23.9 22.3	37.2 31.8	27.6 26.2	28.6 32.4
	Vans and trucks	%	1987 1988	23.3 24.3	30.1 31.3	30.2 31.8	25.7 25.6	31.2 34.9
	Air conditioners	%	1987 1988	19.9 20.8	... ...	-- --	3.0 3.6	3.8 4.6
46	Proportion of owner-occupied dwellings	%	1987 1988	62.8 62.5	81.0 77.1	74.4 75.0	71.7 70.9	75.6 76.5
47	Proportion of all owner-occupied dwellings which are mortgage-free	%	1987 1988	49.9 50.0	70.5 72.7	56.3 54.5	57.3 56.2	56.5 56.0
48	Number of occupied dwellings in need of repair	'000	1987 1988	2,410 2,469	52 56	10 14	105 110	78 75
49	Dwellings in need of repair as a proportion of all occupied dwellings	%	1987 1988	26.5 26.7	31.9 33.7	23.3 31.8	34.5 35.6	33.3 31.5
50	Median rent-to-income ratio	%	1987 1988	20 21	18 18	24 22	22 23	20 22
Household Expenditures								
51	Average household expenditures	\$	1986	35,200	30,100	26,600	29,700	31,100
52	Share of total expenditures on:							
	Food	%	1986	14.3	17.7	16.1	14.6	15.4
	Tobacco and alcohol	%	1986	3.2	3.7	3.7	3.6	3.3
	Housing	%	1986	24.1	23.4	24.1	24.7	23.0
	Clothing	%	1986	6.3	7.0	6.0	5.8	6.3
	Transportation	%	1986	13.2	13.3	14.9	14.2	14.0
	Health and personal care	%	1986	3.8	3.9	4.2	3.6	4.0
	Recreation, reading and education	%	1986	6.5	5.9	5.8	6.2	6.1
	Other	%	1986	28.7	24.9	25.2	27.4	27.8

Key Labour and Income Facts

Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Year	Unit	No.
32,900	39,500	32,400	31,700	37,300	35,300	..	..	1986	\$	44
35,600	43,400	34,300	33,800	38,900	37,000	..	..	1987		
										45
43.8	46.3	47.9	39.9	49.6	43.6	..	..	1987	%	
49.0	54.2	49.7	47.2	58.0	50.7	..	..	1988		
36.7	44.3	53.7	57.0	56.5	44.3	..	..	1987	%	
49.0	54.6	55.3	64.0	64.9	55.0	..	..	1988		
23.7	29.8	31.8	34.6	35.6	32.3	..	..	1987	%	
25.2	29.9	28.7	36.0	35.3	31.2	..	..	1988		
13.8	18.1	31.6	43.3	39.7	33.9	..	..	1987	%	
14.6	20.1	31.1	45.3	40.4	32.4	..	..	1988		
13.5	32.6	38.9	24.7	9.2	7.0	..	..	1987	%	
13.1	35.6	39.5	27.7	7.8	6.9	..	..	1988		
55.3	62.9	68.2	72.2	63.2	64.9	..	..	1987	%	46
55.3	63.2	66.1	70.9	63.9	63.0	..	..	1988		
47.3	48.9	53.7	60.7	45.8	47.4	..	..	1987	%	47
44.1	50.4	55.8	57.5	47.2	49.7	..	..	1988		
561	903	114	120	221	245	..	..	1987	'000	48
565	930	122	100	218	279	..	..	1988		
23.8	27.5	30.0	33.7	26.8	21.8	..	..	1987	%	49
23.4	27.8	32.1	27.9	25.7	24.4	..	..	1988		
19	21	22	24	20	23	..	..	1987	%	50
20	20	23	23	22	23	..	..	1988		
33,000	38,300	31,200	31,800	37,800	34,600	..	..	1986	\$	51
										52
15.2	13.6	14.7	13.6	13.3	14.3	..	..	1986	%	
3.6	3.0	3.4	3.5	2.7	2.9	..	..	1986	%	
23.1	24.5	24.6	23.8	24.5	24.9	..	..	1986	%	
6.7	6.3	6.1	6.6	6.1	5.5	..	..	1986	%	
12.7	13.5	13.9	13.4	13.4	12.7	..	..	1986	%	
3.9	3.7	3.7	3.6	4.0	3.8	..	..	1986	%	
5.8	6.5	7.2	7.5	7.1	7.0	..	..	1986	%	
28.8	29.1	26.4	28.0	28.8	29.1	..	..	1986	%	

Notes

- | | |
|--|--|
| <p>2 Labour force as a proportion of the population aged 15 and over.</p> <p>7 Unemployed as a proportion of the labour force.</p> <p>9 Full-time labour force: includes persons working full-time, those working part-time involuntarily and unemployed persons seeking full-time work.</p> <p>Part-time labour force: includes persons working part-time voluntarily and unemployed persons seeking part-time work.</p> <p>On the margins of the labour force: persons not looking for work because they believe none is available or because they are waiting for recall or for replies from employers.</p> | <p>10 Rate shows hours lost through unemployment (unemployed multiplied by average actual weekly hours) and through underemployment (that is, short-time work schedules and involuntary part-time employment) as a proportion of hours worked plus hours lost.</p> <p>41 For an explanation of the methodology underlying the low-income cutoff, see <i>Income Distributions by Size in Canada</i> (13-207).</p> |
|--|--|

In the Works

Here are some of the topics to be featured in upcoming issues of **Perspectives on Labour and Income**:

■ **Canada's automobile industry**

It not only coped with the 1979 oil shock and the economic downturn of the early 1980s but also bounced back with renewed vigour.

■ **Unionization among women**

A look at changes in unionization among women and at the characteristics of women in unionized and non-unionized jobs.

■ **Immigrant workers**

Immigrant workers are concentrated in certain occupations, among them the "product fabricating, assembling and repairing" group. This study will focus on these workers, particularly garment workers, mechanics and other groups where their representation is very high.

■ **The Help-wanted Index**

An examination of what this indicator of labour demand has to offer.

■ **Wives as primary family breadwinners**

More working wives are earning more than their spouses. Who are they? Career-oriented women or women whose spouses have suffered recent economic hardship?

■ **Vacations**

Time off for vacation is the most important reason for absence from work. A look at the vacation time taken by Canadian workers by season and "vacationer characteristics".

■ **Unemployment – a tale of two sources**

A comparison of unemployment data from the Labour Force Survey and the Unemployment Insurance program explaining the sources of difference.

PERSPECTIVES ON LABOUR AND INCOME

The quarterly for labour market information.

PERSPECTIVES

ON LABOUR AND INCOME

NEW FROM STATISTICS CANADA

- ☐ Yes, I want PERSPECTIVES ON LABOUR AND INCOME (75-001E) for \$50 a year (\$60 a year for subscriptions outside of Canada).

Order Form

Mail to:
Publications Sales
Statistics Canada
Ottawa, Ontario K1A 0T6

(Please print)

Company _____

Department _____

Attention _____

Title _____

Address _____

City _____

Province/Country _____

Postal Code _____

Tel. _____

Reference Number _____

METHOD OF PAYMENT

Order Number _____

Payment enclosed _____

Charge to my:

() MasterCard () Visa () Statistics Canada

Account No. _____

Expiry Date _____

() Bill me later

Signature _____

PF 03502

Cheque or money order should be made payable to the Receiver General of Canada/Publications, in Canadian funds or equivalent.

For faster service



1-800-267-6677



MasterCard or Visa accounts



ROCK SOLID INFORMATION

Get a focus on Canada's markets and business opportunities with **the** source of reliable information...Statistics Canada and its unequalled family of outstanding publications and services.

Relying on Statistics Canada means you're building your decisions on hard facts assembled by a professional organization with a world-wide reputation for scrupulous accuracy and complete reliability.

Join the thousands of corporations and individuals who base their Canadian business decisions on Statistics Canada publications. Year after year.

For more information on Statistics Canada's extensive range of publications and information services, please call toll-free 1-800-267-6677.

At Statistics Canada, we provide information you can build on.

PERSPECTIVES

ON LABOUR AND INCOME

**The comprehensive labour and income journal from
Statistics Canada.**

The 1980s have seen wide-reaching changes in the labour market and in the distribution of income and wealth. An aging workforce, rising educational levels and the rapid expansion of the service industries have profoundly affected businesses and families alike.

Perspectives on Labour and Income keeps you informed about these vital trends. Using Statistics Canada's full range of income and employment information, it offers you insightful and timely analysis on important issues each quarter.

Order now and save!

Order your subscription to **Perspectives on Labour and Income** (75-001E) and receive five issues for the price of four! (A one-year subscription costs just \$50.)

Contact: Publications Sales, Statistics Canada, Ottawa, Ontario, K1A 0T6.
Or, for faster service, call toll free **1-800-267-6677** and use your VISA or MasterCard.

PERSPECTIVES

ON LABOUR AND INCOME

Catalogue 75-001E



AUTUMN 1989

- CANADIAN AUTO INDUSTRY
- THE LABOUR MARKET: MID-YEAR REPORT
- UNIONIZATION AND WOMEN
- VACATIONS
- HELP-WANTED INDEX
- DISCOURAGED WORKERS



Statistics
Canada

Statistique
Canada

Canada

At Your Service...

Statistics Canada's Reference Centres in Canada's Major Cities

St. John's	(772-4073)
Halifax	(426-5331)
Montreal	(283-5725)
Ottawa	(951-8116)
Toronto	(973-6586)
Winnipeg	(983-4020)
Regina	(780-5405)
Edmonton	(495-3027)
Calgary	(292-6717)
Vancouver	(666-3691)

How to Order Publications

This and other Statistics Canada publications may be purchased from local authorized agents and other community bookstores, through the local Statistics Canada offices, or by mail order to Publication Sales, Statistics Canada, Ottawa, K1A 0T6.

1 (613) 951-7277

Facsimile Number 1(613)951-1584

National toll free order line 1-800-267-6677 (Toronto
Credit card only: 973-8018)

Toll-free access is provided in all provinces and territories, for users who reside outside the local dialing area of any of the regional reference centres.

Newfoundland and Labrador	1-800-563-4255
Nova Scotia, New Brunswick and Prince Edward Island	1-800-565-7192
Quebec	1-800-361-2831
Ontario	1-800-268-1151
Manitoba	1-800-542-3404
Saskatchewan	1-800-667-7164
Alberta	1-800-282-3907
Southern Alberta	1-800-472-9708
British Columbia (South and Central)	1-800-663-1551
Yukon and Northern B.C. (area served by NorthwesTel Inc.)	Zenith 0-8913
Northwest Territories (area served by NorthwesTel Inc.)	Call collect 403-495-2011

PERSPECTIVES

ON LABOUR AND INCOME

Autumn 1989
Vol. 1, No. 2

Articles

7 The Canadian Auto Industry, 1978-1986
Michel Côté

The Canadian motor vehicle industry has faced a number of challenges since the late 1970s, including the oil price shock and a major recession. This article traces employment, earnings and output changes over the turbulent 1978-1986 period and provides a portrait of the industry in 1986. Comparisons are drawn with the industry's performance in the United States.

19 The Labour Market: Mid-year Report
Ernest B. Akyeampong

Employment growth moderated considerably this year, and shifted its focus westward: more than half the growth occurred in British Columbia. An up-to-date look at labour market developments in the first six months of 1989.

30 Unionization and Women in the Service Sector
Heather A. Clemenson

Trade unionism is adapting, as the service sector and women's share of employment expand. This study looks at unionization among women in the service sector during the 1980s. Trends by occupation and industry are examined for full-time and part-time workers, as are the earnings of unionized and non-unionized workers.

45 Taking Their Leave
David Gower

Are winter vacations from work becoming more popular? Do vacation patterns differ by age, sex, industry or job tenure? These are among the questions addressed in this study. Trends since the 1950s are also briefly reviewed.

Departments

3 Forum

5 Highlights

70 Sources

81 Key Labour and Income Facts

93 In the Works

On the Cover:

Computer Artwork
The Stock Market Inc.

Perspectives on Labour and Income
(Catalogue 75-001E; aussi disponible en français, n° 75-001F au répertoire) is published four times a year under the authority of the Minister of Regional Industrial Expansion.
© Minister of Supply and Services Canada 1989. ISSN: 0840-8750 (75-001E), 0843-4565 (75-001F)
SUBSCRIPTION RATES: \$50 a year in Canada, \$60 elsewhere. Single issue \$12.50 in Canada, \$15 elsewhere.

53 Job Ads: A Leading Indicator?

Cynthia Haggar-Guénette

The Help-wanted Index measures job ads as an indicator of labour demand. The index is considered a leading indicator of labour market conditions and of general economic activity. This study looks at the performance of the index during the last three business cycles.

64 "Discouraged Workers"

Ernest B. Akyeampong

"Discouraged workers" are persons who want a job but are not seeking one because they believe no suitable work is available. This note summarizes findings on discouraged workers from the Survey of Job Opportunities conducted in March 1989.

Symbols

The following standard symbols are used in Statistics Canada publications:

...	figures not available
...	figures not appropriate or not applicable
—	nil or zero
--	amount too small to be expressed
p	preliminary figures
r	revised figures
x	confidential to meet secrecy requirements of the Statistics Act

PERSPECTIVES

ON LABOUR AND INCOME

Editor in Chief

Ian Macredie
(613) 951-9456

Managing Editor

Maryanne Webber
(613) 951-6894

Editors

Henry Pold
Doreen Duchesne
Heather Clemenson
Christine Campbell

Data and Graphics

Coordinator

James Darch

Production Coordinator

Lyne Naguib

Marketing Coordinator

Bruce Simpson

Design and Composition

Publications Division

Extracts from this publication may be reproduced for individual use without permission provided the source is fully acknowledged. However, reproduction of this publication in whole or in part for purposes of resale or redistribution requires written permission from the Programs and Publishing Products Group. Acting Permissions Officer, Crown Copyright Administration, Canadian Government Publishing Centre, Ottawa, Canada K1A 0S9.

Forum

From the Editor

■ Among the articles in this issue is a report on Canadian labour market developments in the first six months of 1989. This continues a tradition of semi-annual labour market reviews formerly published in the "Feature Section" of *The Labour Force*. Many of those we spoke to in the course of market research for *Perspectives on Labour and Income* told us that they wanted such reviews to continue in this publication. I mention this to show that we really do want feedback on articles, and will try our best to accommodate suggestions. The purpose of *Forum* is to share this feedback, be it critical or complimentary. And, if you don't have an opinion to express on the articles or on the publication, we would invite you to make use of our *Sources* bulletin board.

While on the subject of contributions from our readers, we have been gratified by the number of people inquiring if *Perspectives* would consider articles authored outside Statistics Canada. The answer is yes, most definitely. Those interested should contact us for information on our editorial policy and on how to proceed.

Finally, I would like to mention that this issue contains several offers of data diskettes for readers interested in pursuing their own analysis. Diskettes are our way of making additional data available without resorting to pages and pages of tables in *Perspectives*. The modest price is possible because they are a spin-off of our analytical work.

In this issue three diskettes are offered. The first is linked to the article "Discouraged Workers". The second contains data used in a study undertaken last year on labour market conditions in Canada and the United States during the 1980-1987 period. The diskette has been updated to include 1988 estimates. A selection of highlights based on this update is presented in *Sources*. The third is a ten-year time-series for a wide range of labour and income indicators by province and, where available, territory. We hope these diskettes (or their paper counterparts, if preferred) will satisfy some of the additional data needs of *Perspectives* readers. Again, feedback will help us to improve these products.

I hope that you enjoy reading this issue of *Perspectives on Labour and Income* as much as we enjoyed producing it.

Ian Macredie
Editor in Chief



Letters

■ "Canada's Unemployment Mosaic" in the Summer 1989 issue of *Perspectives* is a fascinating article, with excellent graphics and a wealth of data, unobtrusively presented in tables. However, it left a lot of unanswered questions.

The material would have been much enriched if it had been accompanied by references to the events which influenced labour market activities in the areas exhibiting large changes in unemployment rates, such as Thunder Bay, St. Catharines-Niagara, London, Quebec City, Saskatoon, Windsor and Winnipeg. As it is, readers have to dig up this information themselves in order to understand what was determining shifts in labour markets across the country.

Catherine Harris
Contributing Editor
Financial Post

□

■ The articles in the preview edition of *Perspectives on Labour and Income* provided competent analysis of significant trends in the labour market and, more important, they raised many questions that warrant further consideration. I was also pleased to note that where the figures were broken out from national aggregates, this was done by province rather than by region.

On the other hand, I was disappointed that the editors of *Perspectives* did not extend an invitation to analysts outside of Statistics Canada to submit studies for consideration for publication.

Rosemarie Langhout
Labour Market Analyst
Department of Career Development
and Advanced Studies
Government of Newfoundland and
Labrador

□

Note: Manuscripts from outside Statistics Canada are welcomed. See "From the Editor".

■ We were very interested to read the new publication entitled *Perspectives on Labour and Income*. We appreciated the descriptive analysis of the topics covered, which are very much in keeping with the concerns of the Canada Employment and Immigration Commission. We believe that this publication will become a valuable source of both qualitative and quantitative information. The possibility of obtaining regional and intraregional data will be most useful in view of the nature of our work in the Economic Services Branch of EIC-Quebec.

Again I would like to express our appreciation for this new publication.

Francine Bertrand
Director, Economic Services
Quebec Region
Employment and Immigration
Canada

□

We welcome your views on articles and other items that have appeared in *Perspectives on Labour and Income*. Additional insights on the data are also accepted, but to be considered for publication, communications should be factual and analytical. We encourage readers to inform us about their current research projects, new publications, data sources and upcoming events relating to labour and income.

Statistics Canada reserves the right to select items for publication. Correspondence, in either official language, should be addressed to: Heather Clemenson, Forum and Sources editor, *Perspectives on Labour and Income*, 5-A Jean Talon Building, Statistics Canada, Ottawa, K1A 0T6, or call (613) 951-0178.

Highlights

Here are some key findings from the articles in this issue of Perspectives on Labour and Income.

The Canadian Auto Industry, 1978-1986

■ In 1986, the motor vehicle industry's shipments exceeded \$38 billion or 15% of all manufacturing shipments. About 90% of the goods originated in Ontario.

■ There were 152,000 employees in the automobile industry on average during 1986, making it the second largest employer in manufacturing. Only the food industry had more workers.

■ Although women are under-represented in the auto industry and paid less than men, female auto workers had earnings 15% above the manufacturing average for women in 1985.

■ In contrast to the United States, Canada's auto industry has fully recovered from the recession in the early 1980s. In 1986, Canadian shipments were 39% higher than in 1978, but in the United States they were still below the 1978 peak.

■ The Canadian automobile industry gained 11,000 employees between 1978 and 1986 (an increase of 9%), while its American counterpart lost 217,000 (a loss of 20%).

The Labour Market : Mid-year Report

■ Between the last quarter of 1988 and the second quarter of 1989, employment rose by only 125,000 (seasonally adjusted). Close to half of the increase occurred in British Columbia. The employment growth rate for the province was 4.2%, well over the national rate of 1.0%.

■ Gains in employment were centred in two industry groups: transportation, communication and other utilities; and finance, insurance and real estate. Full-time employment accounted for all the net increase in employment, as part-time employment declined.

■ The number of unemployed as well as the unemployment rate showed little movement, remaining at slightly over one million and 7.6% respectively. The number of long-term unemployed and average duration of unemployment (18.6 weeks) have stabilized.

Unionization and Women in the Service Sector

■ For women who held a full-year job in the service sector, the unionization rate increased from 36% in 1981 to 44% in 1986.

■ From 1981 to 1986, the number of women in full-time, year-round clerical jobs dropped by 9%. Over the same period, the unionization rate for this group rose from 34% to 42%.

■ In the service sector, women in non-unionized full-year jobs earned on average 21% less per hour in 1981 than their unionized counterparts. In 1986 the difference was 27%.

■ Among women employed throughout 1986 in a unionized job, average hourly earnings were slightly higher for part-time workers than for full-time workers. Higher wages in lieu of benefits for some part-time workers may have contributed to the difference.

Taking Their Leave

■ In an average summer week nearly 1.5 million people – representing 14% of all workers – are absent from work due to vacation. Vacations are the single most important reason for full-week absences.

■ The proportion of workers on vacation more than doubled from the mid-1950s to the mid-1970s, but has since levelled off.

■ As a worker's tenure with the same employer increases, so does the likelihood of taking a vacation. Vacations also tend to be longer. This pattern holds true in both summer and winter.

■ In a typical summer week of 1988, 15% of Canada's 2.7 million working couples had at least one partner on vacation. In only half of these cases were both partners vacationing.

Job Ads: A Leading Indicator?

■ During the last two business cycles, the help-wanted index has signalled an approaching economic recession one to two months before its onset.

■ In the 1970s and 1980s, the index moved in tandem with the employment-population ratio, especially for young people.

■ In recent years, trends in the unemployment rate have been anticipated by changes three to five months earlier in the index.

"Discouraged Workers"

■ In the wake of the last economic recession, the number of "discouraged workers" increased from 101,000 in 1981 to 197,000 in 1983. Since then, their numbers have declined and seem to have stabilized at about 70,000.

■ "Discouraged workers" tend to be concentrated in areas of high unemployment, most notably the Atlantic region. Local conditions appear to influence willingness to move. In 1989, about 25% of discouraged workers in the Atlantic region expressed a willingness to move elsewhere for a job; in prosperous Ontario, very few said they would relocate. □

The Canadian Auto Industry, 1978-1986

Michel Côté

In the early 1980s, the North American motor vehicle industry appeared to be wilting under the triple impact of the 1979 oil price shock, the loss of market share to overseas manufacturers and the worst recession since the Second World War. In both Canada and the United States, sales of domestically produced vehicles had declined sharply, plants were closed, workers were laid off and profits had fallen to the point where at least one of the Big Four¹ teetered on the brink of bankruptcy.

By the mid-1980s, the industry had made a remarkable turnaround. In the wake of massive investments, new management techniques and government assistance, both assemblers and parts manufacturers improved the productivity of their operations and the quality of their output. Production and sales of domestically produced vehicles increased and assemblers regained some of their lost market share, as revamped product lines found favour with consumers. A strong economic recovery and continuing expansion led to record profits.

Although these results are impressive, the benefits to the industry's labour force are less so. In the U.S., employment levels have improved from the low point of the 1981-82 recession but they

have not yet returned to the heights reached in the late 1970s. Nor have average earnings kept pace with inflation. In Canada, employment has now reached record levels but, as in the U.S., average earnings have declined in real terms.

This article examines the Canadian motor vehicle industry's performance from 1978 to 1986. The study uses results from the annual Census of Manufactures, supplemented by other sources. The Canadian experience is also compared with that of the United States. Results for the U.S. come primarily from the Annual Survey of Manufactures conducted by the Bureau of the Census.

Canadian motor vehicle industry in 1986

The Canadian motor vehicle industry consists of three major components: (1) assemblers of automobiles, buses, truck chassis and truck tractors; (2) manufacturers of motor vehicle parts and accessories; and (3) manufacturers of truck and bus bodies, commercial and non-commercial trailers and mobile homes. These will generally be referred to as assembly, parts, and trailers, respectively. The parts and trailers components are further broken down into several related sub-industries. (See "The motor vehicle industry: defining the components".)

Michel Côté is an analyst with the Labour and Household Surveys Analysis Division. He can be reached at (613) 951-6896.

Canada's largest manufacturing producer

In 1986, motor vehicle manufacturers shipped \$38.5 billion worth of manufactured goods or 15% of all manufacturing shipments that year (Table 1). This was \$4 billion more than the food industry, the next largest manufacturing sector. Assembly operations generated 63% of automotive shipments, parts 34%, and trailers only 3%. Nearly 90% of manufacturing shipments originated in Ontario.

The motor vehicle industry is also one of Canada's most important export industries: in 1984, it accounted for 40% of exports of manufacturing shipments.² The

proportion of the industry's shipments slated for destinations outside Canada was almost three times more than the average for all of manufacturing: 75% vs. 27%. In fact, two of the component industries – assembly and parts – produce mainly for the export market: in 1984, 82% of assembly's shipments, and 67% of parts', were destined for other countries. This is because of the progressive rationalization of production on a North American scale by the Big Four after the Auto Pact was signed in 1965. (In 1967, only 35% of manufacturing shipments were exported by the assembly and parts components.) The trailer component, which produces mainly for the domestic market, exported only 13% of its shipments in 1984.

Table 1
Canadian Motor Vehicle Industry: Selected Characteristics, 1986

	Establishments		Value of manufacturing shipments		
	Number	Average number of employees	\$ million	%	% from Ontario
All manufacturing industries	38,380	47	253,411	...	54
Motor vehicle industry	897	169	38,510	100	90*
Assembly	26	2,059	24,287	63	88
Parts and accessories	560	152	12,922	34	97
Engines and engine parts	46	338	3,364	9	99
Wiring assemblies	35	161	398	1	x
Stampings	86	141	2,103	5	99
Steering and suspension	32	158	663	2	x
Wheels and brakes	49	136	925	2	94
Plastic parts	91	123	1,264	3	89
Fabric accessories	19	341	959	2	99
Other	202	112	3,247	8	97
Truck and bus bodies and trailers	311	42	1,302	3	52*
Truck and bus bodies	124	38	418	1	47
Commercial trailers	82	57	477	1	66
Non-commercial trailers	88	31	320	1	51
Mobile homes	17	51	88	–	x

Source: Annual Census of Manufactures.

* Represents minimum possible value (estimated for this study).

The motor vehicle industry: defining the components

Two generations of the Canadian Standard Industrial Classification (SIC) are used in this analysis. The 1980 SIC is used to examine the structure of the industry in 1986 and the 1970 SIC is used to evaluate the industry's performance from 1978 to 1986. The 1970 SIC does not provide sub-industry detail for the parts component and excludes plastic parts and fabric accessories manufacturers from the motor vehicle industry.

This use of two SICs affects the statistics somewhat. For example, according to the 1980 SIC, there were 152,000 employees in the motor vehicle industry in 1986 while under the 1970 SIC the figure is 134,000. However, the conclusions drawn in the article are not significantly affected by these differences.

Some activities which could be considered part of the motor vehicle industry have been excluded. Tire manufacturers are excluded because the Statistics Act does not permit publication of survey results that could be attributed to specific establishments or companies in order to protect confidentiality. In addition, some establishments manufacturing items such as car batteries or glass windshields are excluded because their parent industries produce a range of items mostly unrelated to the motor vehicle industry.

Based on the 1980 SIC, the Canadian industry includes the following groups:

Assembly

- 3231 Motor vehicle industry

- Parts
 - 3251 Motor vehicle engines and engine parts
 - 3252 Motor vehicle wiring assemblies
 - 3253 Motor vehicle stampings
 - 3254 Motor vehicle steering and suspension parts
 - 3255 Motor vehicle wheels and brakes
 - 3256 Plastic parts and accessories for motor vehicles
 - 3257 Motor vehicle fabric accessories
 - 3259 Other motor vehicle accessories, parts and assemblies

Trailers

- 3241 Truck and bus bodies
- 3242 Commercial trailers
- 3243 Non-commercial trailers
- 3244 Mobile homes

United States data are classified according to the 1972 U.S. Standard Industrial Classification. As in Canada, tire manufacturers are excluded.

The American motor vehicle industry includes the following groups:

Assembly

- 3711 Motor vehicles and car bodies

Parts

- 3465 Automotive stampings
- 3714 Motor vehicle parts and accessories

Trailers

- 3713 Truck and bus bodies
- 3715 Truck trailers
- 3716 Motor homes produced on purchased chassis

An industry of large plants

More than half of all motor vehicle employees work in establishments employing over 1,000 workers (Table 2). In 1986, General Motors in Oshawa and St. Catharines, Ford in Oakville, and Chrysler in Windsor each had assembly plants exceeding 5,000 employees. Except for GM's Ste-Thérèse plant in Quebec, all establishments employing over 1,000 workers in 1986 were located in Ontario.

With almost 152,000 employees, the motor vehicle industry is the second largest manufacturing employer in Canada after the food industry. Over 56% of its work force is employed in parts manufacturing, 35% in assembly operations and less than 9% in the trailer component (Table 2). The industry is

by far the largest manufacturing employer in Ontario, where 88% of its work force is located.

The automotive industry's work force is predominantly male and blue-collar,³ more so than the average for all of manufacturing. Female employees are under-represented among both white- and blue-collar workers: only 19% of production workers and 22% of administrative employees are female. The under-representation of females can be traced to the assembly and trailer components: only 3% of blue-collar workers in the first and 7% in the second are female. On the other hand, females make up a larger than average proportion of the parts work force (31%), especially in wiring assemblies (77%) and fabric accessories (61%).

Table 2
Canadian Motor Vehicle Industry: Selected Labour Characteristics, 1986

	All employees				Production workers	
	Number ('000)	% in establishments of 1000 +	% female	% in Ontario	% of all employees	% female
All manufacturing	1,809	14	26	52	75	24
Motor vehicle industry	152	51*	20	88*	82	19
Assembly	54	97	6	86	78	3
Parts and accessories	85	30*	30	95	85	31
Engines and engine parts	16	76*	14	99	86	14
Wiring assemblies	6	—	70	95*	83	77
Stampings	12	10*	20	98	87	19
Steering and suspension	5	25*	21	86*	82	19
Wheels and brakes	7	—	15	92	80	12
Plastic parts	11	—	45	91	87	46
Fabric accessories	6	62*	57	99	88	61
Other	23	30	28	95	84	28
Truck and bus bodies and trailers	13	—	10	46*	83	7
Truck and bus bodies	5	—	10	41	87	7
Commercial trailers	5	—	7	60	76	2
Non-commercial trailers	3	—	15	43	86	13
Mobile homes	1	—	13	3*	87	11

Source: Annual Census of Manufactures.

* Actual data are not published. An estimate based on the published distribution of establishments by size groups (specifically, the mid-point of the size group) was used as an approximation.

Earnings are better than average

The industry's payroll totalled \$4.8 billion in 1986, the largest wages and salaries bill in manufacturing. Blue-collar workers earned an average of \$12.94 an hour, 12% better than in all of manufacturing (Table 3). But within the motor vehicle industry, the range in hourly earnings was wide: workers in the engines and engine parts sub-industry earned 36% above the manufacturing average while those in wiring assemblies earned 27% below the average.

White-collar workers earned \$39,100 in 1986, 14% above the manufacturing average. Again, employees in the engines and engine parts sub-industry fared best, with salaries 33% above the manufacturing average, while those in mobile home manufacturing found themselves at the bottom, 24% below average.

Women's earnings are relatively high. Results from the 1986 Census of Population

indicate that women employed in the motor vehicle industry are better paid than women in other manufacturing industries. Women who worked full-time throughout 1985 earned on average \$20,400 or 15% above the earnings of women in all of manufacturing⁴ (Table 4). The earnings advantage was greater for women in blue-collar occupations than for their white-collar counterparts.

Although better off in relative terms, women working full-time in the industry throughout 1985 received on average \$11,400 or 36% less than men. The discrepancy is considerably smaller in the assembly and trailer components than in the parts component, where most women in the industry are employed.

Part of the explanation for the discrepancy in earnings is that women in the automotive industry are concentrated in lower-paid occupations. For example, 71% of women in white-collar jobs were in clerical occupations, with an average income in 1985

Table 3
Canadian Motor Vehicle Industry: Selected Payroll Characteristics, 1986

	Total payrolls	Blue-collar average hourly wage	White-collar average yearly salary
	\$ million	\$	\$
All manufacturing industries	48,749	11.60	34,300
Motor vehicle industry	4,828	12.94	39,100
Assembly	2,066	14.06	42,800
Parts and accessories	2,466	12.49	37,100
Engines and engine parts	582	15.78	45,700
Wiring assemblies	110	8.47	32,500
Stampings	348	12.47	38,000
Steering and suspension	153	12.86	39,500
Wheels and brakes	190	12.22	35,500
Plastic parts	239	9.24	30,800
Fabric accessories	198	13.36	35,800
Other	646	12.37	35,700
Truck and bus bodies and trailers	295	10.52	30,500
Truck and bus bodies	105	10.34	28,900
Commercial trailers	116	11.31	29,000
Non-commercial trailers	57	9.68	38,900
Mobile homes	17	10.00	25,900

Source: Annual Census of Manufactures.

Table 4
Average Employment Income of Full-time, Full-year* Workers in 1985

	Number of persons	Average employment income		
		All occupations	Blue-collar	White-collar
	'000		\$	
Males				
All manufacturing	1,191	29,800	26,700	35,900
Motor vehicle industry	111	31,800	29,900	38,300
Assembly	51	34,200	32,800	40,400
Parts and accessories	50	30,800	28,500	37,900
Truck and bus bodies and trailers	10	24,100	21,800	31,600
Females				
All manufacturing	400	17,700	15,500	20,300
Motor vehicle industry	26	20,400	19,400	22,600
Assembly	5	26,500	25,400	27,800
Parts and accessories	20	19,100	18,500	21,000
Truck and bus bodies and trailers	1	18,500	18,100	18,700

Source: Census of Population – see note 4.

* 40-52 weeks.

of \$20,900; 57% of men were either in managerial or in engineering and scientific occupations, with average incomes of \$48,300 and \$36,800 respectively. Women in blue-collar occupations did relatively better because 70% were employed in the higher-paid product fabricating, assembling and repairing occupations. But even there they earned 34% less than men.

Foreign ownership is high

In 1986, 92% of sales were generated by foreign-controlled enterprises (Table 5). The degree of foreign control may have a bearing on the occupational structure of the motor vehicle industry in Canada in that many administrative and financial tasks, as well as development activities, are undertaken by the parent firms in the U.S. or overseas. In-house research and development activity in Canada also appears to be limited. Statistics Canada does not publish figures for research and development expenditures by the industry. However, it does publish expenditure figures for the whole transportation equipment group, including the motor

vehicle industry, which show outlays totalling \$479 million in 1986. Of this, 77% was spent by the aircraft and aircraft parts industry, leaving only \$111 million expended by all of the other industries in the group⁵ including, in addition to motor vehicle manufacturers, the railway rolling stock industry, the shipbuilding, boatbuilding and repair industries, and manufacturers of snowmobiles and all-terrain vehicles.

Table 5
Proportion of Sales Made by Foreign-controlled Enterprises, 1986

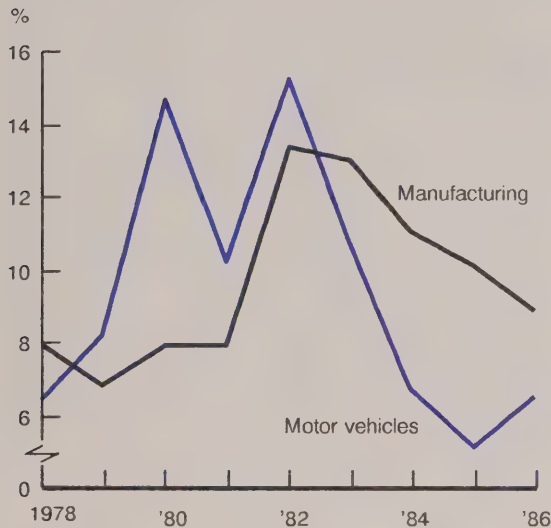
	All foreign enterprises	Top four foreign enterprises
	%	
Motor vehicle industry	92	78
Assembly, parts and accessories*	94	80
Truck and bus bodies and trailers	23	19

Source: Corporations and Labour Unions Returns Act.

* Excludes plastic parts and fabric accessories.

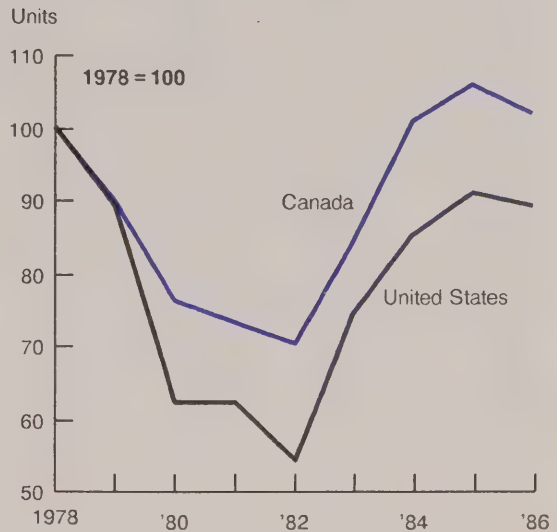
Unemployment Rates, Canada

The industry was hit hard in the early '80s but recovered quickly.



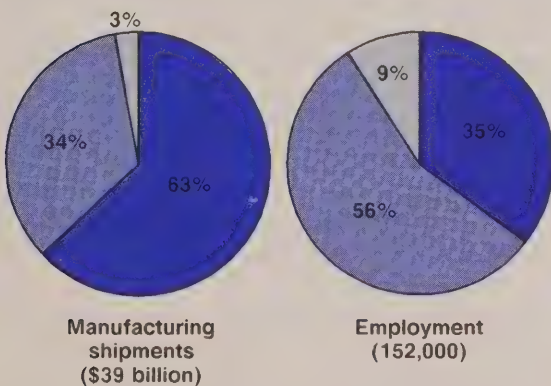
Index of Motor Vehicle Production

The production decline was not as steep in Canada and the recovery was more successful.



Manufacturing Shipments and Employment in the Motor Vehicle Industry, Canada, 1986

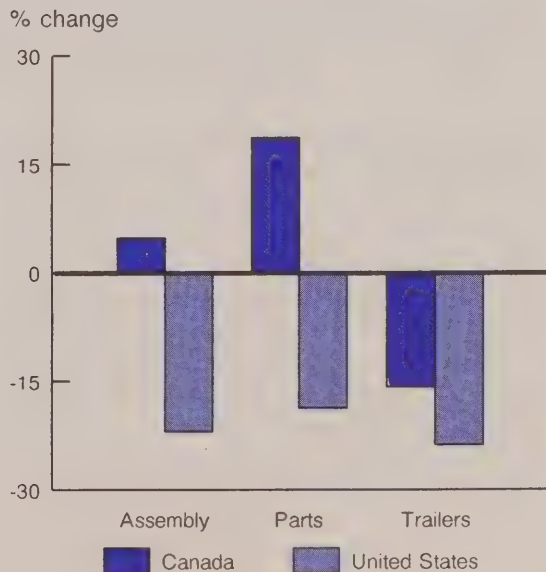
Assembly accounts for almost two-thirds of shipments but the majority of workers are in the parts component.



Assembly Parts Trailers

Change in Employment for the Motor Vehicle Industry, 1978-1986

Employment in assembly and parts increased in Canada but declined in the U.S.



Industry performance in Canada and the U.S.

Canada's share of the North American automotive industry has grown since 1978. The 1981-82 recession hit the U.S. industry harder and, since then, growth has been more vigorous in Canada. The differences between the two countries are marked. The value of manufacturing shipments (measured in 1981 dollars) dropped 21% in Canada between 1978 and 1982, compared with 39% in the U.S.⁶ By 1986, Canadian shipments had rebounded to 39% over the previous peak in 1978 but U.S. shipments were still 9% short. In Canada, the actual number of cars and trucks produced was slightly higher in 1986 than in 1978; in the U.S., the 1986 level lagged by 2 million units.

Overseas producers have progressively increased their share of the Canadian new vehicle market to 25% in 1986. Despite these inroads and despite the economic recession, the number of cars and trucks produced in Canada has exceeded the number of new vehicles purchased by Canadians in every year since 1978, with the surplus going to the U.S. market. In 1986, the industry produced 22% more vehicles than were sold in Canada. In the U.S., production was consistently below sales during the period.

Employment has increased in Canada but dropped in the U.S.

The Canadian motor vehicle industry was more severely affected than other manufacturing industries by the dual impact of the 1979 oil price shock and the 1981-82 recession. The number of unemployed rose rapidly, from 6.4% of the industry's labour force in 1978 to 15.3% in 1982. In 1980, a third of all workers in manufacturing who were unemployed due to layoff had been working in the motor vehicle industry. But the situation reversed itself quickly. By

1984, employment in the industry had surpassed its 1978 level (Table 6). The industry's unemployment rate dropped to 6.5% by 1986, compared with 8.8% for all of manufacturing. Over the period, the blue-collar work force grew by 12% and the number of white-collar workers declined marginally.

In the U.S. automotive industry, the number of employees dropped 20% from over a million in 1978 to 845,000 in 1986. The blue-collar work force shrank by 22% and the number of white-collar workers by 11%.

Employment has decreased in all three components of the U.S. automotive industry. Out of a total decline of 217,000 between 1978 and 1986, 54% was in parts, 36% in assembly and 10% in trailers. In Canada, the trailer component also suffered a decline, while most of the increase in employment was in the parts component.

Workers in both countries have suffered a decline in average earnings. Although the average yearly salary of administrative employees rose 3% between 1978 and 1986, production workers in the Canadian automotive industry saw their hourly wage (measured in 1981 dollars⁷) decline by 5%. In the U.S., blue-collar wages (in 1981 U.S. dollars) declined by only 2% but white-collar salaries dropped by 8%. Across the industry's components, there were only two exceptions to these developments: white-collar workers in Canadian assembly received a 7% salary increase and blue-collar workers in U.S. assembly saw their hourly wage rise 1%.

Capital expenditures were important to the industry's recovery

The recovery of the Canadian motor vehicle industry may be attributable in part to a substantial increase in capital expenditures. Between 1978 and 1986, the industry spent over \$7.3 billion (1981 dollars) on new construction, machinery and equipment

Table 6
Canadian and U.S. Motor Vehicle Industries: Comparative Statistics

	Manufacturing shipments*	Number of employees			Average hourly earnings of production workers	Average yearly salary of administrative workers
		Total	Production workers	Administrative workers		
	1981 Cdn \$ million	'000	'000	'000	1981 Cdn \$	1981 Cdn \$
Canada						
1978	21,055	123	97	26	10.54	29,000
1979	19,901	123	97	26	10.47	28,700
1980	16,251	106	81	25	10.57	27,800
1981	16,766	107	83	24	10.35	27,300
1982	16,695	100	76	24	10.09	25,900
1983	20,660	109	86	23	10.27	27,700
1984	27,006	128	102	26	10.24	29,000
1985	29,664	137	111	26	10.50	29,400
1986	29,217	134	109	25	10.00	29,800
	1981 US \$ million	'000	'000	'000	1981 US \$	1981 US \$
United States						
1978	185,803	1,062	883	179	12.61	33,700
1979	169,624	1,018	836	181	12.26	31,900
1980	123,967	815	645	170	12.26	30,300
1981	125,942	791	637	154	12.20	29,200
1982	113,766	706	560	146	11.75	28,100
1983	143,535	755	611	145	11.79	30,100
1984	168,203	865	708	157	11.48	31,000
1985	171,647	871	713	158	12.30	31,200
1986	169,998	845	685	160	12.33	31,100

Source: Canada, *Annual Census of Manufactures* and U.S., *Annual Survey of Manufactures*.

* U.S. figures include, in addition to manufacturing shipments, outputs such as products bought and resold without further processing.

(Table 7).⁸ This was three times the amount it had spent during the previous nine years. Major investments by General Motors in its Autoplex plants in Oshawa and by Japanese and Korean manufacturers in new assembly operations in Ontario and Quebec brought spending in 1986 to a record \$2.2 billion, accounting for 17% of all capital spending in manufacturing. Many factors may have encouraged the establishment of transplant operations in Canada, among them the appreciation of the Japanese yen, voluntary restraints on the exportation of motor

vehicles from Japan to Canada, and the imposition of a tariff on motor vehicle imports from developing countries.

In the U.S., capital expenditures by the motor vehicle industry totalled \$53 billion (1981 U.S. dollars) between 1978 and 1986, about three-quarters more than during the previous nine years. The United States was benefiting from Japanese direct investments as early as 1982, the year Honda started shipping from its Ohio assembly plant. Nissan, Toyota, Mazda and others have since followed suit or have announced plans to do so.

Table 7
Capital Expenditures by Industry, Canada and United States, 1978-1986

	Canada		United States	
	All manufacturing industries	Motor vehicle industry	All manufacturing industries	Motor vehicle industry
	1981 Cdn \$ million		1981 US \$ million	
1978	6,819	325	72,075	6,312
1979	7,619	518	73,869	6,178
1980	10,094	1,005	76,962	6,649
1981	12,739	972	78,632	8,959
1982	10,738	398	69,619	4,416
1983	8,340	581	58,480	2,361
1984	8,392	414	70,663	4,458
1985	10,586	923	78,136	6,461
1986	13,148	2,206	72,365	7,465

Source: Canada, *Capital and Repair Expenditures Survey* and U.S., *Annual Survey of Manufactures*.

Productivity increased in both countries

The productivity of blue-collar workers in the automotive industry has improved since 1978. In 1986, it was 11% higher in Canada and 14% higher in the U.S.⁹ But between 1985 and 1986, productivity rose in the U.S. and dropped in Canada, with the largest drop occurring in assembly operations. The Canadian decline in productivity reflects a 2% drop in manufacturing shipments coupled with a 3% rise in blue-collar paid hours. In the U.S., shipments fell by 1% but hours fell even further, by 4%.

The next challenge

The North American motor vehicle industry's response to the economic events of the early 1980s and to the competition from overseas imports has been successful but

uneven. In the U.S., production and employment have recovered from the low point of the recession, but the recovery has fallen short of the post-war peak in 1978. Canada's industry has outperformed its American counterpart, expanding its share of production and employment beyond the levels reached in 1978, although Canadian productivity growth in 1986 was trailing.

A new challenge now faces the industry: adapting to the growing presence of Asian manufacturers in North America – the so-called transplants. In 1986, one such transplant in Canada and three in the U.S. had an estimated combined annual capacity of almost 900,000 vehicles. In 1989, eleven transplants will be in operation with an estimated capacity of over two million units.¹⁰ With new operations on such a massive scale, the coming decade may see profound changes in the industry. □

Notes

¹ The Big Four are General Motors, Ford, Chrysler and American Motors. Chrysler absorbed American Motors in 1987.

² These export figures are based on results from the Destination of Shipments Survey, an occasional supplement to the Census of Manufactures. This survey reports the level of exports by industry rather than by commodity, as is the case for the monthly external trade statistics. The survey was first conducted in 1967 and subsequently in 1974, 1979 and 1984.

³ The terms blue-collar workers, hourly paid workers and production workers are used interchangeably here. The same applies to the terms white-collar workers, salaried employees and administrative employees.

⁴ Census of Population data were used in this study to show differences in the earnings of men and women. Earnings data from this source differ from those of the Census of Manufactures for methodological reasons. It should also be noted that earnings data from the Census of Population do not necessarily correspond to the occupation and industry reported. Earnings data refer to the calendar year 1985. The job reported is the one held at the time of the Census (June 3, 1986); if the person was not working at that time, then the job of longest duration held since January 1985 is reported.

⁵ The R&D figures are taken from *Industrial Research and Development Statistics, 1986*, Table 4.

⁶ U.S. shipments were deflated by the gross domestic product implicit price index (1982=100) re-based to 1981. Canadian shipments were deflated by the gross domestic product implicit price index (1981=100).

⁷ Earnings in both Canada and the U.S. were deflated using the consumer price index. The U.S. index (1967=100) was re-based to 1981.

⁸ Canadian construction expenditures were deflated separately from machinery and equipment expenditures and the results added together. The business investment non-residential construction implicit price index was used to deflate construction expenditures; the business investment machinery and equipment implicit price index was used to deflate expenditures on machinery and equipment. U.S. capital expenditures were deflated by the gross private domestic fixed investment, non-residential implicit price index, re-based to 1981.

⁹ Productivity is measured in terms of manufacturing value added per production worker hour paid, expressed in 1981 dollars. Canadian value added was deflated by the gross domestic product implicit price index (1981=100). U.S. value added was deflated by the gross domestic product implicit price index (1982=100), re-based to 1981.

¹⁰ For further information on transplants see Industry, Science and Technology Canada's *Report on the Canadian Automotive Industry* for 1985 and 1986.

References

- Statistics Canada. *Census of Manufactures, Transportation Equipment Industries* (42-251B). 1986.
- Statistics Canada. *Annual Census Of Manufactures, SIC 3200, Transportation Equipment Industries* (42-251). 1986.
- Statistics Canada. *Capital and Repair Expenditures, Manufacturing Sub-Industries, Canada, Outlook* (61-214). 1980 and subsequent years.
- Statistics Canada. *Corporations and Labour Unions Returns Act, Part 1*. CANSIM matrices 007166 and 007167.
- Statistics Canada. *Implicit Price Indexes, Gross Domestic Product (1981=100)*. CANSIM matrix 006633.
- Statistics Canada. *Industrial Research and Development Statistics* (88-202). 1986.
- Statistics Canada. *Investment Statistics - Manufacturing Sub-industries, Canada* (61-518). 1960-1977.
- Statistics Canada. *Manufacturing Industries of Canada: National and Provincial Areas* (31-203). 1978 and subsequent years.
- Statistics Canada. *New Motor Vehicles Sales* (63-007). Monthly.

- Industry, Science and Technology Canada. *Report on the Canadian Automotive Industry*, 1985. Ottawa, 1987. See also report for 1986, published in 1988.
- Motor Vehicle Manufacturers Association of Canada. *Production of Motor Vehicles in Canada*. CANSIM matrix 000079.
- U.S. Department of Commerce (Bureau of the Census). *Annual Survey of Manufactures, Statistics for Industry Groups and Industries*. Washington, D.C., 1978 and subsequent years.
- U.S. Department of Commerce (Bureau of Economic Analysis). *Business Statistics, 1986: A Supplement to the Survey of Current Business*. Washington, D.C., December 1987.
- U.S. Department of Commerce (Bureau of Economic Analysis). *The Income and Product Accounts of the United States, 1929-82: Statistical Tables*. Washington, D.C., September 1986.
- U.S. Department of Commerce (Bureau of Economic Analysis). *Survey of Current Business*. Washington, D.C., monthly.
- U.S. Department of Labor. *Consumer Price Index (U.S.) (1967=100)*. CANSIM matrix 000337.

Chart references

Unemployment Rates, Canada: Labour Force Survey.

Index of Motor Vehicle Production: Canada, Motor Vehicle Manufacturers Association of Canada; U.S., Survey of Current Business.

Manufacturing Shipments and Employment in the Motor Vehicle Industry, Canada, 1986: Annual Census of Manufactures.

Change in Employment for the Motor Vehicle Industry, 1978-1986: Canada, Annual Census of Manufactures; U.S., Annual Survey of Manufactures.

The Labour Market: Mid-year Report

Ernest B. Akyeampong

Labour market performance in the first half of 1989 was mixed. Between the last quarter of 1988 and the second quarter of this year, the number of employed Canadians increased by 125,000. This was lower than the increase during the same period last year (175,000), and the lowest since 1985. Employment levels also fluctuated from month to month during the first half of this year. And, compared with recent experiences, the geographic, industry, demographic and full-time/part-time distribution of employment gains were different during the early half of 1989.

Employment growth was not the only major indicator registering moderation. Other major macro-economic indicators showing similar tendencies in recent months include consumer spending, housing starts and exports. As well, the help-wanted index, an indicator of labour demand, has remained stable in the last several months, following six years of sustained increase.

In contrast to the employment swings, there has been little change in unemployment so far this year. Between the last quarter of 1988 and the second quarter of 1989 the number of unemployed remained at slightly over one million and the unemployment rate at 7.6%.

Ernest B. Akyeampong is with the Labour and Household Surveys Branch. He can be reached at (613) 951-4624.

Unless otherwise stated, changes in employment and unemployment during the first half of this year refer to differences in Labour Force Survey (LFS) seasonally adjusted data between the last quarter of 1988 (IV 1988) and the second quarter of 1989 (II 1989). This formula applies to all other years as well. Some data series were seasonally adjusted specifically for this study. Data on earnings come from the Survey of Employment, Payrolls and Hours (SEPH), while those on person-days lost due to industrial disputes were supplied by Labour Canada.

Employment

Employment developments in the first half of this year differ from those of the same period last year in two main respects. First, employment gains have moderated; second, the distribution of job gains is different.

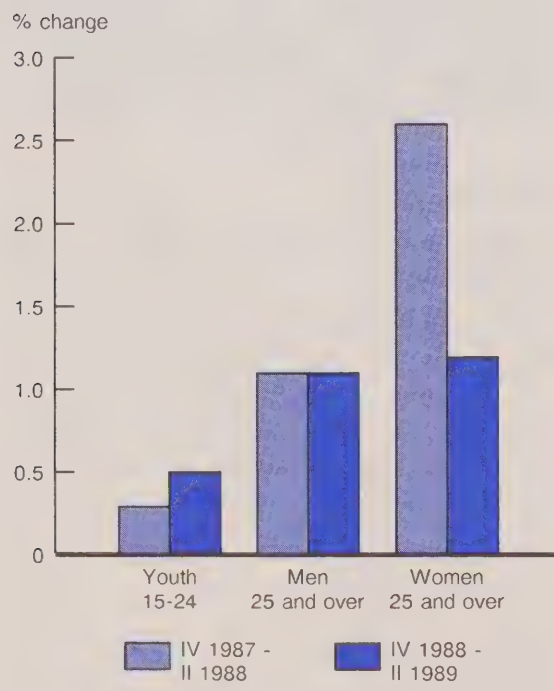
Indicators such as reduced consumer spending and high (but stable) manufacturing capacity utilization rates have all recently pointed to a slowdown. Such a development is not surprising in this phase of the business cycle – the seventh year of economic expansion. Indeed, the 1.0% employment growth so far this year is identical to the increase recorded in a similar period during the 1961-1974 economic expansion. The pattern of job gains is examined below.

Employment growth moderates for adult women

All the moderation in employment gains so far this year occurred among adult women (25 years of age and over). The increase for this group was reduced to half of that recorded in the same period a year ago (Table 1). Employment gains for young workers (aged 15-24) and for adult men were virtually unchanged from those of a year ago.

Employment Growth by Sex and Age (seasonally adjusted)

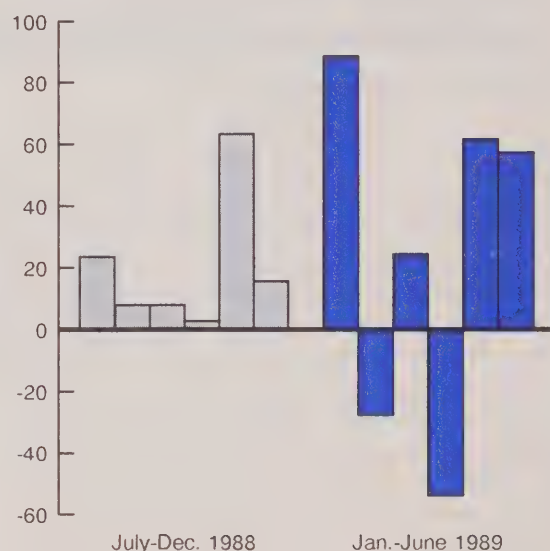
All the moderation in employment growth so far this year occurred among adult women.



Employment Growth (seasonally adjusted)

Compared with the last half of 1988, employment levels this year have been unsettled.

Month-to-month change (000s)



Goods sector lost jobs, service sector gained

All job gains in the first half of 1989 were in the service industries. In the goods-producing industries, overall employment declined marginally (Table 2).

In the goods sector, the small employment gain in manufacturing was more than offset by losses in agriculture. The manufacturing industry's employment gain in the first half of this year was only a third of the increases recorded in similar periods in the past two years. Employment

Table 1
Employment Growth by Age and Sex, Seasonally Adjusted*, 1986-1989

	IV 1986 to II 1987		IV 1987 to II 1988		IV 1988 to II 1989	
	'000	%	'000	%	'000	%
Total	226	2.0	175	1.5	125	1.0
Youth (15-24 years)	40	1.7	8	0.3	11	0.5
Men 25 years and over	78	1.5	62	1.1	62	1.1
Women 25 years and over	108	2.8	105	2.6	51	1.2

Source: Labour Force Survey.

* Based on quarterly averages derived from seasonally adjusted monthly data.

Table 2
Employment Growth by Industry, Seasonally Adjusted*

	IV 1986 to II 1987		IV 1987 to II 1988		IV 1988 to II 1989	
	'000	%	'000	%	'000	%
Goods-producing industries	91	2.6	44	1.2	-10	-0.3
Service industries	120	1.5	113	1.3	122	1.4
Agriculture	-3	-0.6	-19	-4.1	-18	-4.1
Other primary	-3	-1.1	11	3.9	-3	-1.0
Manufacturing	45	2.3	45	2.2	15	0.7
Construction	35	5.6	-3	-0.4	3	0.4
Transportation, communication and other utilities	23	2.6	6	0.7	54	6.0
Trade	-9	-0.4	28	1.3	38	1.8
✓ Finance, insurance and real estate	9	1.3	22	3.0	29	4.1
Community, business and personal service	99	2.6	60	1.5	-57	-1.4
Public administration	11	1.4	9	1.1	37	4.5

Source: Labour Force Survey.

* Estimates by industry are independently seasonally adjusted. The national total, which is obtained by adding the components age by sex, may differ from the sum of independently derived series.

in agriculture declined by 18,000 during the first six months of the year, similar to the fall recorded in the same period last year. Thus, this year's favourable weather conditions and increased international commodity prices have not, to date,

succeeded in arresting the downward employment spiral in agriculture. Employment in construction, at 744,000 in the second quarter of 1989, remains at historically high levels and was virtually unchanged from the figure in the last quarter of 1988.

Employment growth of 122,000 in the service sector was a shade larger than that of last year. Except for the job losses in the community, business and personal service industry group (-57,000), all other service industries, led by transportation, communication and other utilities, recorded employment gains which exceeded those in the corresponding period last year.

The employment loss in community, business and personal services so far this year is intriguing considering that, in the last three years, this industry group accounted for more than 40% of the net job gains across the economy. Indeed, it even escaped the widespread job losses during the 1981-1982 economic recession.

All job gains in "blue-collar" occupations

Almost all of the net gains in employment so far this year have been in "blue-collar" jobs, specifically in processing (82,000) and transportation (18,000) occupations (Table 3). This is in direct contrast to last year's pattern, when "white-collar" jobs accounted for all employment growth. Employment levels in the managerial, administrative and professional group, which dominated last year's employment growth, have fallen marginally this year. The number of clerical jobs also declined slightly this year, offsetting some of last year's gains.

Table 3
Employment Growth by Occupation, Seasonally Adjusted*, 1987-1989

	IV 1987 to II 1988		IV 1988 to II 1989	
	'000	%	'000	%
"White-collar"***				
Managerial, administrative and professional	80	2.3	-11	-0.3
Clerical	65	3.2	-15	-0.7
Sales	37	3.2	20	1.7
Services	29	1.8	25	1.5
"Blue-collar"***				
Primary occupations	-5	-0.8	-19	-3.2
Processing	-7	-0.4	82	5.0
Construction trades	-13	-1.8	10	1.4
Transportation	1	0.2	18	4.0
Material handling and other crafts	-21	-4.6	-3	-0.7

Source: Labour Force Survey.

* Estimates by occupation are independently seasonally adjusted and may differ from the national total.

** The terms "white-collar" and "blue-collar" occupations are used in this study only as a convenient abbreviation.

Growth shifts from central Canada to British Columbia

A significant labour market development in the first half of this year has been the shift in employment gains from central Canada to British Columbia (Table 4).

Ontario, for several years, contributed about one-half of the net national job gains, but its share dropped to less than one-third (37,000) this year. For the first time in years, the rate of employment growth in this province fell below the national average. Employment in Ontario may be at or nearing "full employment" levels.

Employment declined slightly in Quebec (-11,000) in the first half of 1989. Some of the job losses in this province can be traced to reduced activity in a number of industries: construction; transportation, communication and other utilities; and, in

recent months, community, business and personal services.

British Columbia accounted for close to half of the net national employment gain in the first six months of 1989 (57,000). British Columbia's strong showing stems partly from increased activity in construction. Its booming tourist industry has also contributed to employment growth.

Alberta, Newfoundland, and Nova Scotia also enjoyed growth rates above the national average. For Alberta and Newfoundland, this was the second consecutive time that employment growth was above the national average during the first six months of the year. Newfoundland and Nova Scotia owe some of their employment gains to the transportation, communication and other utilities industry.

Employment Growth by Province (seasonally adjusted)

Employment growth shifted from central Canada to British Columbia.

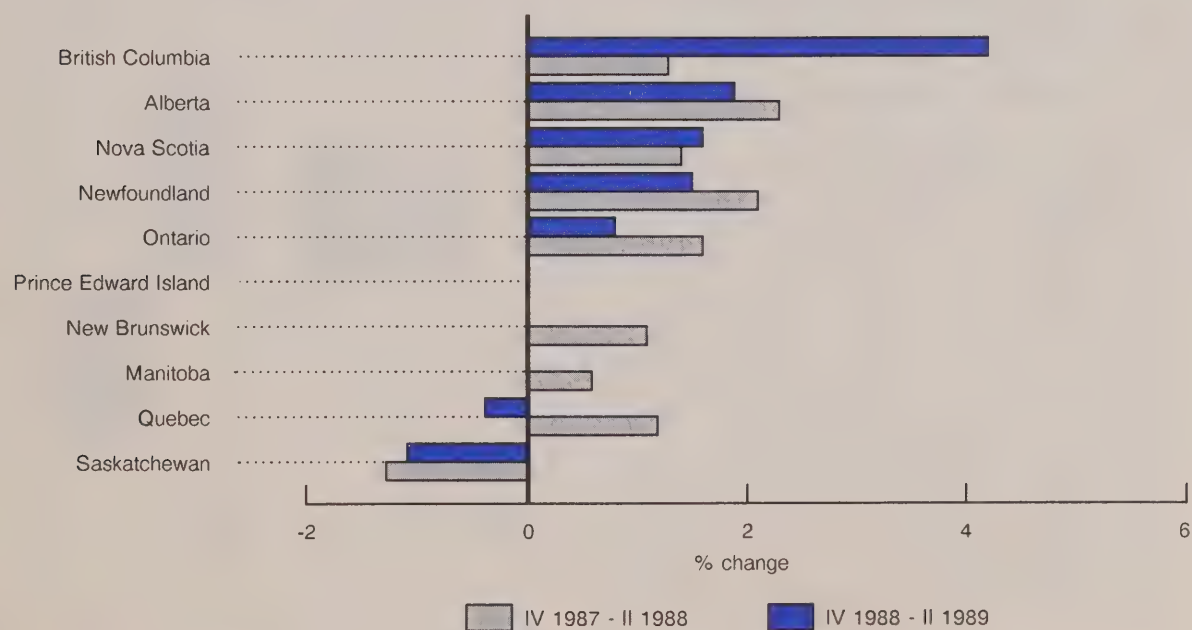


Table 4
Employment Growth, by Province, Seasonally Adjusted*, 1986-1989

	IV 1986 to II 1987		IV 1987 to II 1988		IV 1988 to II 1989	
	'000	%	'000	%	'000	%
Newfoundland	2	1.1	4	2.1	3	1.5
Prince Edward Island	1	2.0	0	0.0	0	0.0
Nova Scotia	7	2.1	5	1.4	6	1.6
New Brunswick	5	1.9	3	1.1	0	0.0
Quebec	65	2.3	36	1.2	-11	-0.4
Ontario	90	2.0	74	1.5	37	0.8
Manitoba	-1	-0.2	3	0.6	0	0.0
Saskatchewan	-1	-0.2	-6	-1.3	-5	-1.1
Alberta	9	0.8	27	2.3	23	1.9
British Columbia	40	3.2	17	1.3	57	4.2

Source: Labour Force Survey.

* The sum of the independently adjusted provincial estimates may differ from the national total.

Saskatchewan was the only province, besides Quebec, to register employment loss during the first half of this year. Employment levels remained unchanged in Prince Edward Island, New Brunswick and Manitoba.

Saskatchewan, Alberta, Quebec and Ontario continued to experience job losses in agriculture during the early half of 1989.

Full-time work rises, part-time declines

Another interesting development to date has been the large increase in full-time jobs (148,000) and the decline (-30,000) in part-time jobs (Table 5). During the same period two years earlier, full-time jobs also accounted for all the employment growth, but at that time the decline in part-time jobs was marginal. Part-time employment last registered a significant decrease during the same period five years ago (-24,000).

Some of the decline in part-time employment this year can be traced to community, business and personal services – an industry group with an above-average incidence of part-time employment.

Full-time and Part-time Employment Growth (seasonally adjusted)

Full-time employment accounted for all the job gains this year; part-time work declined.

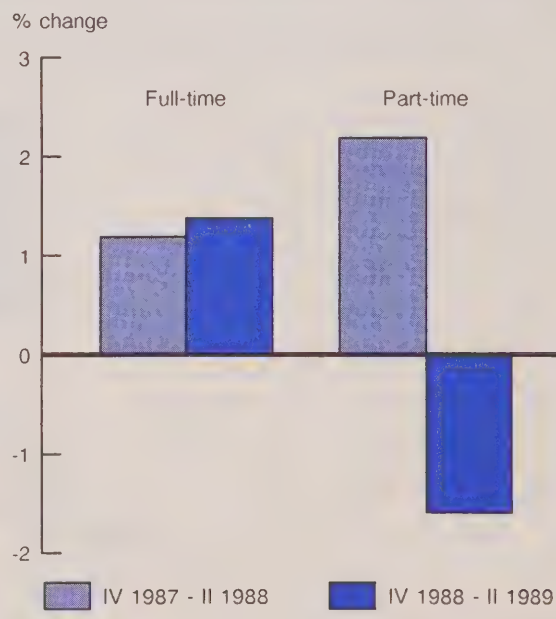


Table 5
Full-time and Part-time Employment Growth, Seasonally Adjusted*, 1986-1989

	IV 1986 to II 1987		IV 1987 to II 1988		IV 1988 to II 1989	
	'000	%	'000	%	'000	%
Total	226	2.0	175	1.5	125	1.0
Full-time	220	2.2	121	1.2	148	1.4
Part-time	-3	-0.2	40	2.2	-30	-1.6

Source: Labour Force Survey.

* Estimates by full-time and part-time employment are independently seasonally adjusted and may differ from the national total.

The relative stability in the number of involuntary part-time workers (persons working part-time because they could not find full-time employment) is also noteworthy. Between the last quarter of 1988 and the second quarter of this year, the number remained virtually unchanged, at 427,000.

Self-employment declines, multiple jobholding rises

Paid work accounted for all employment gains during the first half of this year. Self-employment declined, since the increase recorded for women (15,000) was more than offset by the decrease experienced for men (-23,000). This was the first decrease in self-employment since the early half of 1984.

During the second quarter of this year, 574,000 Canadians were holding down two or more jobs at the same time, a slight increase over the average in the last quarter of 1988. The growth in multiple jobholding or "moonlighting" in Canada in recent years has been very rapid. Since the end of the recession, the number of Canadians holding more than one job concurrently has increased by 64%, compared with a 19% growth in overall employment.¹

Unemployment

Despite the rise in jobs, the estimated number of unemployed Canadians remained almost unchanged (at 1,023,000) in the first half of 1989. Unemployment has stayed at slightly over one million for a year and a half, except in two months – June 1988 and June this year – when it fell just below the one million mark.

Even though the overall number of unemployed Canadians remained stable, the number of **job losers** – people who lost or were laid off their last job – increased slightly during the first half of this year. Their number rose by 12,000 (to 528,000) between the last quarter of 1988 and the second quarter of this year.² This increase, the first since 1984, was borne almost entirely by women. Unemployment resulting from job leaving (220,000) and from entry or re-entry into the labour force (284,000) remained almost the same.

The **unemployment rate** (7.6%) has changed little since early 1988. The youth unemployment rate declined from 12.1% in the last quarter of 1988 to 11.4% in the second quarter of this year, but the rates for adult men (6.2% in the second quarter of 1989), and for adult women (7.3%), have

remained fairly stable. The decline in the youth unemployment rate since the depths of the recession – when it reached 21.0% – has been dramatic. The fall is partly due to a dwindling youth population. Both the youth participation rate (at 70.3% in the second quarter of 1989) and the employment/population ratio (at 62.3%) are at historical peak levels this year.

Of the provinces, Alberta, British Columbia and Nova Scotia recorded a drop in their unemployment rates during the first half of this year. Rates in Newfoundland and Prince Edward Island edged up, while those in the other provinces showed little or no change (Table 6).

Similarly, **unemployment duration** and the incidence of **long-term unemployment** have remained stable. Between January and June this year unemployed Canadians have experienced an average of 18.6 weeks of unemployment, virtually unchanged from the level in the same period a year ago (18.8 weeks).³ The number continuously unemployed for over six months in the first half of 1989 averaged close to a quarter of a million (221,000). This is similar to the figure for the corresponding period last year (220,000), but significantly lower than the 385,000 figure five years ago.

Wages, inflation and labour unrest

Wage increases during the first four months of this year appear to lag slightly behind the rate of inflation. Weekly earnings (excluding fringe benefits) averaged \$477.90 from January to May 1989. This represented an increase of 4.2% over the level in the same period last year. The comparable increase in the Consumer Price Index was a little higher, at 4.6%.

Person-days lost as a result of labour disputes (strikes and lock-outs) totalled

428,000 during the first four months of this year. Though higher than last year's level (392,000), this figure is much below the peaks of a decade ago.⁴ It is difficult to interpret the meaning of this year's increase. Time lost due to industrial disputes is a function of many factors, not the least of which are the expiry dates of collective agreements and the numerical size of the disputing bargaining units.

Canada – U.S. comparisons

Labour market performance in the United States during the first half of this year parallels that of Canada in some respects. Employment growth, as in Canada, moderated in the United States. It amounted to about 1.2%. As well, the U.S. unemployment rate, lower than the Canadian rate for several years, remained fairly stable around 5.3% between the last quarter of 1988 and the second quarter of 1989. But performance in the two countries has differed in one important respect. In the U.S., monthly employment growth during the first six months of this year was steady, in contrast to the sizeable fluctuations observed in Canada.

Conclusion

In addition to the moderation in employment growth for adult women, there were several noteworthy labour market developments during the first half of 1989. These included (a drop in part-time employment, an increase in full-time work, a decline in self-employment, and a rise in the number of job losers. Labour market analysts will be watching closely to see if these evolve into new trends in the coming months. □

Table 6
**Labour Force Characteristics by Province, Seasonally Adjusted, Selected Quarters,
 1986-1989**

		II 1986	IV 1986	II 1987	IV 1987	II 1988	IV 1988	II 1989
CANADA								
Labour force	'000	12,738	12,790	12,989	13,118	13,236	13,353	13,468
Employed		11,522	11,589	11,815	12,049	12,224	12,320	12,445
Unemployed		1,217	1,201	1,174	1,069	1,013	1,033	1,023
Participation rate	%	65.8	65.7	66.2	66.5	66.7	66.8	67.0
Unemployment rate		9.6	9.4	9.0	8.2	7.7	7.7	7.6
Employment/population ratio		59.5	59.5	60.3	61.0	61.6	61.7	61.9
Newfoundland								
Labour force	'000	223	220	221	226	231	231	236
Employed		181	178	180	188	192	198	201
Unemployed		41	42	42	38	39	33	35
Participation rate	%	53.6	52.9	52.8	53.8	54.7	54.4	55.3
Unemployment rate		18.6	19.1	18.8	17.0	16.7	14.3	14.8
Employment/population ratio		43.7	42.8	42.8	44.7	45.5	46.6	47.1
Prince Edward Island								
Labour force	'000	58	59	59	61	62	62	63
Employed		50	51	52	53	53	55	55
Unemployed		8	8	7	8	8	8	8
Participation rate	%	62.1	62.1	62.5	63.8	64.2	64.4	65.2
Unemployment rate		13.7	13.6	12.4	13.1	13.5	12.3	13.4
Employment/population ratio		53.5	53.7	54.7	55.4	55.6	56.5	56.5
Nova Scotia								
Labour force	'000	393	393	398	405	406	408	414
Employed		342	339	346	361	366	367	373
Unemployed		51	53	52	44	40	41	40
Participation rate	%	59.6	59.3	59.9	60.6	60.6	60.6	61.3
Unemployment rate		13.0	13.6	13.1	10.9	9.8	10.0	9.7
Employment/population ratio		51.8	51.2	52.0	54.1	54.6	54.5	55.3
New Brunswick								
Labour force	'000	307	306	312	316	315	323	324
Employed		262	265	270	275	278	285	285
Unemployed		45	41	42	41	37	38	39
Participation rate	%	57.6	57.2	58.1	58.6	58.3	59.5	59.3
Unemployment rate		14.7	13.4	13.6	12.9	11.7	11.8	12.0
Employment/population ratio		49.1	49.5	50.2	51.1	51.4	52.5	52.2
Quebec								
Labour force	'000	3,161	3,186	3,252	3,262	3,289	3,349	3,341
Employed		2,820	2,848	2,913	2,947	2,983	3,032	3,021
Unemployed		341	338	339	315	306	317	320
Participation rate	%	62.2	62.4	63.4	63.3	63.6	64.5	64.1
Unemployment rate		10.8	10.6	10.4	9.6	9.3	9.5	9.6
Employment/population ratio		55.5	55.8	56.8	57.2	57.7	58.4	57.9

Table 6
**Labour Force Characteristics by Province, Seasonally Adjusted, Selected Quarters,
 1986-1989 – Concluded**

		II 1986	IV 1986	II 1987	IV 1987	II 1988	IV 1988	II 1989
Ontario								
Labour force	'000	4,863	4,896	4,970	5,067	5,107	5,145	5,184
Employed		4,519	4,568	4,658	4,785	4,859	4,887	4,924
Unemployed		344	328	312	282	248	258	261
Participation rate	%	68.7	68.5	68.9	69.5	69.5	69.5	69.5
Unemployment rate		7.1	6.7	6.3	5.6	4.9	5.0	5.0
Employment/population ratio		63.8	63.9	64.6	65.7	66.2	66.1	66.1
Manitoba								
Labour force	'000	526	532	531	529	533	540	541
Employed		484	492	491	490	493	499	499
Unemployed		41	41	40	39	41	42	42
Participation rate	%	66.4	66.9	66.4	66.1	66.4	67.2	67.4
Unemployment rate		7.9	7.6	7.5	7.4	7.6	7.8	7.8
Employment/population ratio		61.2	61.8	61.5	61.2	61.4	62.1	62.1
Saskatchewan								
Labour force	'000	489	488	486	492	486	488	482
Employed		451	451	450	457	451	450	445
Unemployed		38	37	36	35	35	38	38
Participation rate	%	66.7	66.3	66.0	66.9	66.2	66.8	66.1
Unemployment rate		7.7	7.5	7.4	7.2	7.2	7.8	7.9
Employment/population ratio		61.5	61.3	61.1	62.1	61.4	61.6	61.0
Alberta								
Labour force	'000	1,270	1,263	1,266	1,271	1,288	1,294	1,304
Employed		1,139	1,133	1,142	1,163	1,190	1,188	1,211
Unemployed		131	129	124	109	98	106	93
Participation rate	%	72.3	71.9	71.9	72.0	72.5	72.3	72.3
Unemployment rate		10.3	10.2	9.8	8.5	7.6	8.2	7.1
Employment/population ratio		64.8	64.6	64.8	65.9	67.0	66.3	67.2
British Columbia								
Labour force	'000	1,446	1,460	1,485	1,498	1,512	1,521	1,571
Employed		1,270	1,269	1,309	1,337	1,354	1,367	1,424
Unemployed		176	191	176	161	158	154	146
Participation rate	%	65.1	65.3	66.0	65.8	65.8	65.4	66.7
Unemployment rate		12.2	13.1	11.8	10.8	10.5	10.1	9.3
Employment/population ratio		57.2	56.8	58.2	58.7	58.9	58.8	60.5

Notes

¹ Multiple jobholding is the subject of a forthcoming article in this publication.

² The figure of 528,000 job losers includes 59,000 who were on temporary lay-off. The number of workers on temporary lay-off remained unchanged during this period.

³ Unemployment duration is based on the number of weeks of continuous unemployment up to the end of the reference week, not on the length of completed spells of unemployment.

⁴ Data pertain to bargaining units with a membership of 500 or more.

Chart references

All the charts are based on seasonally adjusted data from the Labour Force Survey.

Unionization and Women in the Service Sector

Heather A. Clemenson

In Canada, as in the United States and Europe, unionization among women has historically been lower than it has among men. Low unionization rates for women are linked in part to their concentration in the service sector and in part-time jobs.¹ Traditionally, male blue-collar workers in the goods-producing sector have represented the bastion of trade unionism, and white-collar service-sector workers, especially in private industry, have had extremely low rates of unionization. Similarly, part-time workers have remained largely outside union activity.

With more women in the work force, and with structural changes in the Canadian economy, labour unions have re-examined their approach towards both the service sector and part-time employment. A turning point for the labour movement was the 1981-1982 recession, when employment declined (particularly among men in the heavily unionized manufacturing, construction and resource-based industries), and the trend of gradually increasing union membership was briefly interrupted.² Recent attempts to increase union membership have been focused on the principal growth area of the economy, the service sector. Because more women than men are employed in the

service sector, many union campaigns have targeted female workers (Weiermair, 1988). Over the 1981-1986 period, union membership increased more among women than men (Table 1).³

From 1975 to 1986, part-time jobs grew at a faster rate than full-time jobs, increasing 81% over this period, compared with 17% for full-time jobs. Unions traditionally were opposed to part-time work, principally on the premise that it could threaten full-time jobs (White, 1983). As far back as 1976, however, the Canadian Labour Congress adopted a declaration supporting measures to ensure the equality of part-time and full-time workers. The Commission of Inquiry into Part-Time Work in Canada (1983) found that the attitude of unions towards part-time work was in a period of transition. Some unions were actively promoting the interests of part-time workers while others were opposed to the employment of part-time workers in their work place. White (1983) found that even though many unions were still against the expansion of part-time work, they were generally dealing with the issue not by seeking to eliminate part-time work but by pursuing the goal of equality in rates of pay and pro-rating benefits for part-time workers.

From this background many questions arise concerning the unionization of women in the service sector. For example:

Heather A. Clemenson is with the Labour and Household Surveys Analysis Division. She can be reached at (613) 951-0178.

Table 1
Union Membership of Men and Women, 1981 to 1986

	Total		Men		Women	
	'000	%	'000	%	'000	%
1981	3,160	100	2,180	69	980	31
1982	3,054	100	2,069	68	985	32
1983*	3,391	100	2,212	65	1,179	35
1984	3,439	100	2,220	65	1,219	35
1985	3,493	100	2,228	64	1,265	36
1986	3,603	100	2,293	64	1,310	36
1981-1986 increase	443	14	113	5	330	34

Source: Corporations and Labour Unions Returns Act, Statistics Canada (71-202).

* In 1983, 99 unions, formerly not eligible for inclusion, were added (see note 3).

- Did unionization increase throughout the service sector, or was it concentrated within certain industry groups?
- Was there any notable change in the unionization of women with part-time jobs?
- How did unionization fare in the context of variable employment growth?
- Did unionized women (employed either full-time or part-time) appear to be any "better off" than those not unionized?

This study addresses these questions using data for 1981 and 1986.

Data sources

This study uses data mainly from two household surveys: the Survey of Work History (SWH) and the Labour Market Activity Survey (LMAS). The SWH, conducted in 1982, collected job-related data on up to four employers per person, including union membership, wages and salaries, industry, occupation and hours worked in 1981. The LMAS, conducted in 1987, provided employment information

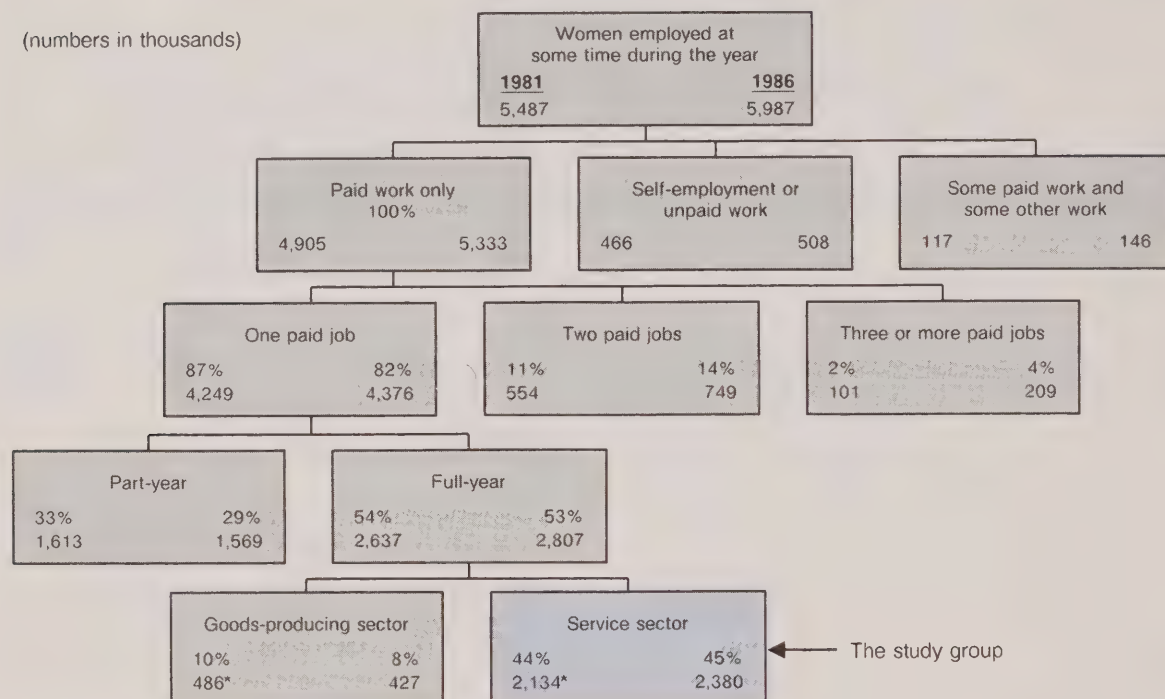
The study group

To facilitate comparisons between full-time and part-time workers in different industry and occupation groups for 1981 and 1986, this study focuses on women who held one paid job⁴ all year. This group accounted for a total of just over 50% of all female paid workers in both years, the majority employed in the service sector. The group includes a large proportion of women with a career attachment to the labour market, though it excludes, for example, women who changed jobs through promotion or job transfer, as well as women who entered, re-entered or retired from the labour market during the year.

on up to five jobs per person during 1986, including details on work schedules, usual wages or salary, union membership and pension plan coverage. The LMAS and the SWH both cover a calendar year and, despite some differences in content and methodology, offer comparable data for the analysis of union membership, hourly earnings and other socio-demographic characteristics for 1981 and 1986.

Defining the Study Group: Women with One Full-year Paid Job

(numbers in thousands)



* See note 7.

The average age for the study group is slightly greater than for all female paid workers because it contains proportionally fewer women aged 16 to 24. Fewer young women worked in one job all year – the majority, including students, worked part-year in one or more jobs. Proportionally more women who worked year-round in one job had a postsecondary certificate, diploma or degree.

Approximately 80% of the group had full-time jobs and 20% had part-time jobs. A distinction can be made between part-time workers who work on a "casual" or "temporary" basis and those who work on a "regular" or "permanent" basis.⁵ Unionization rates for part-time workers in this article refer only to "regular" or "permanent" part-time workers (since part-

year workers are excluded). This results in higher unionization rates than would be the case for all part-time workers.

Did unionization increase throughout the service sector?

From 1981 to 1986, the number of women with one year-round job in the service sector rose by 12%; the number of unionized women increased by 36%,⁶ raising the unionization rate from 36% to 44% (Table 2). In the goods-producing sector the unionization rate for women employed year-round also rose, from 28% to 30%, though in the context of a decrease both in employment and in the number of unionized workers.

Table 2
Employment Growth and Unionization

	Women with one year-round job		
	Total	Unionized jobs	
	'000	'000	%
1981*			
Goods-producing sector	486	135	28
Service sector	2,134	766	36
1986			
Goods-producing sector	427	127	30
Service sector	2,380	1,041	44
	%		
1981-1986 change			
Goods-producing sector	-12	-6	...
Service sector	12	36	...

Source: *Survey of Work History, 1981; Labour Market Activity Survey, 1986.*

* See note 7.

Growth in employment and unionization among women in the service sector varied between industry groups (Table 3). In public services,⁸ employment growth was the highest over the period, and the unionization rate rose from 63% to 72%. In contrast, consumer services recorded low employment growth and little change in the unionization rate.

For women in business services, 1986 unionization rates were also low, despite a 41% increase in unionized jobs. The widely differing rates partly reflect, on the one hand, legislation in the mid-sixties that facilitated unionization among public service employees,⁹ and on the other, the continuing difficulty trade unions face in organizing particular groups of white-collar workers, especially those in the private sector.

While unionization among white-collar workers in public administration and the quasi-public industries (health and education services) is near saturation point (Kumar et al., 1986), female white-collar workers in most business services and consumer services remain largely outside the collective agreement process. A variety

of reasons have been put forward.

One reason is that female white-collar workers in the private sector are often in a weak bargaining position with their employers. Many hold clerical, service or sales jobs that are unskilled and low-paying – jobs for which replacement workers may be relatively easy to find (Marchak, 1973; Baker and Robeson, 1986). Though all clerical, service or sales positions are by no means unskilled or low-paying, the occupational distribution of women is markedly different among the three industry groups. In 1986, 57% of women working year-round in business services had a clerical job, while 58% of women in consumer services had either a clerical or service job (Table 4). In contrast, 61% of women in public services held a managerial or professional position (including teachers and nurses).¹⁰

A related reason for low unionization rates is that business services and consumer services are characterized by relatively small and widely dispersed work places (for example, banks, offices, retail stores and restaurants). In 1986, 38% of women in business services and 54% in

Table 3
Employment Growth and Unionization in Service Sector Industries*

	Women with one year-round job		
	Total	Unionized jobs	
	'000	'000	%
1981			
Public services	912	577	63
Business services	576	100	17
Consumer services	646	89	14
1986			
Public services	1,107	798	72
Business services	608	141	23
Consumer services	664	101	15
	%	%	
1981-1986 change			
Public services	21	38	...
Business services	6	41	...
Consumer services	3	14	...

Source: Survey of Work History, 1981; Labour Market Activity Survey, 1986.

* See note 8 for definition of industry groups.

Table 4
Service Sector Employment by Industry and Occupation

	Women with one year-round job					
	All occupations		Managerial	Clerical	Services	Other
	'000	%	%	%	%	%
1981						
Public services	912	100	58	29	11	2
Business services	576	100	19	68	3	10
Consumer services	646	100	10	34	26	30
1986						
Public services	1,107	100	61	26	11	1
Business services	608	100	28	57	3	12
Consumer services	664	100	15	28	30	27

Source: Survey of Work History, 1981; Labour Market Activity Survey, 1986.

consumer services worked in establishments with fewer than 20 employees (Table 5). This compares with 23% of women in public services. Organizing bargaining units and union certification in such establishments is thus not only more time-consuming, but also more difficult because of high labour turnover, and sometimes strong management opposition.¹¹

The difficulty of organizing white-collar employees in the private sector is well illustrated by the finance industry. Despite the national media attention focused on the organization of workers in the VISA, mortgage and stationery departments of the Canadian Imperial Bank of Commerce in 1985, the Union of Bank Employees and other unions active in

Table 5
Employment by Size of Work Place, 1986

	Women with one year-round job			
	Number of employees at work place			
	1-19	20-99	100-499	500 +
	%			
Public services	23	30	26	20
Business services	38	36	15	10
Consumer services	54	29	14	3

Source: Labour Market Activity Survey, 1986.

organizing bank workers have had limited success in attempting to unionize the finance industry over the past ten years. Bargaining units for certification in this industry are organized at the branch level – hence they tend to be small. In fact, only 67 of the 168 union certifications since 1977 survived to 1986, representing fewer than 2,000 workers (Kumar et al., 1986).

Did unionization increase among part-time workers?

In the view of unions, part-time workers are more difficult to organize than full-time workers (Weeks, 1978). This perception stems partly from the problems of

identifying part-time workers (many of whom may be under contract) and the problems of contacting employees with irregular work schedules. Despite these organizational difficulties, there was an increase in the unionization of year-round, part-time workers over the 1981-1986 period.

For women employed in one service sector job year-round, unionization rates increased for both full-time and part-time workers. Also, within each industry group, the gap in unionization rates between full-time and part-time workers was less pronounced in 1986 than in 1981 (Table 6). In fact, in business services and consumer services the unionization rates in 1986 were basically the same for part-time and for full-time workers.

Table 6
Unionization Rates by Industry

	Women with one year-round job					
	1981		1986		1981-1986 change	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
	%		%		percentage points	
Service sector	40	23	47	34	7	11
Public services	68	41	77	56	8	14
Business services	18	15	23	23	5	9
Consumer services	15	12	15	16	0	5

Source: Survey of Work History, 1981; Labour Market Activity Survey, 1986.

There is also further indication of recent union growth among part-time workers. For example, in 1980, 14% of the white-collar bargaining units certified by the Ontario Labour Relations Board were units of part-time workers; by 1984, the proportion had risen to 30% (Table 7). Most of these part-time units were in health and education (public services) and retail trade (consumer services).

Table 7
White-collar Bargaining Units

	Total units all industries	Part-time units	Part-time units as % of total
			%
1980	160	23	14
1981	185	39	21
1982	131	25	19
1983*	99	19	19
1984	182	55	30
1985	169	57	34
1986	160	48	30

Source: Ontario Labour Relations Board data abstracted from Kumar et al., 1983, 1987.

* See note 12.

Did variable employment growth affect unionization?

Within the service sector, two major occupational groups – the managerial and professional group, and the clerical group – accounted for approximately 75% of all female paid workers employed year-round in 1981 and 1986.¹³ Employment growth in the two occupational groups differed. The most rapid growth was in the managerial and professional group (Table 8). This contrasts sharply with a drop in the number of women employed in year-round clerical jobs, particularly full-time jobs.¹⁴

How has unionization fared within this context of variable employment growth? For these two occupational groups, unionization rates generally increased for both full-time and part-time workers, but

there were notable differences among industries.

In all three industry groups, year-round managerial and professional employment increased. By 1986 the unionization rate for public services rose to exceed 60% for both full-time and part-time workers. In contrast, 1986 unionization rates for managerial and professional workers in business services were extremely low. Some of the newly created managerial positions in these industries may not have been eligible for union membership, or were in industries with low union activity.

The decrease in year-round clerical jobs was not pervasive. In public services the number of full-time clerical positions increased. The unionization rate also rose from 65% in 1981 to 75% in 1986. Business services and consumer services had notable losses of full-time clerical jobs; however, the unionization rate increased in business services and dropped only slightly in consumer services (Table 8).

In public services a relatively large employment growth in year-round, part-time clerical jobs was matched by a rise in the unionization rate from 24% to 38%. In consumer services, unionization rates for year-round, part-time clerical workers increased despite a slight decline in employment.

For clerical workers, the impact of technological change, particularly the introduction of micro-computers in the work place, has been proposed as a major cause of the decline in jobs (Menzies, 1981). Though unions have not always been able to prevent layoffs or job losses, one reaction, particularly in the aftermath of the 1981-1982 recession, has been a greater focus of union attention on non-wage issues, including technological-change provisions and related aspects of worker adjustment and job security. In this non-monetary context, other issues affecting women in

Table 8
Employment Growth and Unionization

	Women with one year-round job					
	Managerial and professional			Clerical		
	Total	Full-time	Part-time	Total	Full-time	Part-time
Employment growth 1981-1986	%					
Service sector	35	33	42	-7	-9	2
Public services	28	25	43	9	7	20
Business services	56	57	--	-12	-14	3
Consumer services	52	56	30	-16	-20	-7
Unionization rates	%					
Service sector						
1981	53	54	48	32	34	19
1986	57	58	54	39	42	26
Public services						
1981	68	72	53	59	65	24
1986	76	80	62	69	75	38
Business services						
1981	--	--	--	20	21	--
1986	14	15	8	26	27	22
Consumer services						
1981	--	--	--	19	18	19
1986	--	--	--	17	15	22

Source: Survey of Work History, 1981; Labour Market Activity Survey, 1986.

the work place have also received increased prominence.¹⁵ The growth in unionization among full-time clerical workers in business services in the face of declining employment, and the marginal decline in unionization in consumer services in the face of a substantial decrease in employment, suggest that the greatest net losses have been non-unionized clerical jobs.

Changes in aggregate unionization rates, however, could also be associated with other factors such as shifts in the type of jobs held, or changes in the distribution of women by age within each industry and occupa-

tional group. For example, examination of unionization by age group reveals that much of the decline in year-round clerical jobs has been for young women (aged 16 to 24). For this group the number of unionized jobs dropped significantly and the unionization rate fell from 28% to 24% (Table 9).

A recent study by Myles, Picot and Wannell (1988) found that, "the restructuring of full-time jobs – both among industries and occupations – was much greater among young than older workers" (p.62). They observed that the loss of job opportunities for young women was

Table 9
**Employment and Unionization of
 Service Sector Clerical Workers**

	Women with one year-round job			
	1981-1986 change		Unionization rate	
	Total jobs	Unionized	1981	1986
	%			
All ages (16-69)*	-7	16	32	39
16 - 24	-37	-47	28	24
25 - 34	9	38	35	44
35 - 44	19	47	33	41
45 - 64	-15	20	30	42

Source: Survey of Work History, 1981; Labour Market Activity Survey, 1986.

* Estimates for 65-69 year olds are too small to release.

particularly concentrated in clerical jobs, and that expanding job opportunities were predominantly in low-paying jobs in consumer service industries and in sales and service occupations (that is, areas of the economy with low rates of unionization). Though other factors probably played a role, these shifts in the job opportunities available to young women between 1981 and 1986 (during and after the economic recession) probably contributed to the decrease in their unionization rate.

Did unionization benefit women?

This question is raised in the context of monetary rather than non-monetary benefits and is focused on average hourly earnings.¹⁶ Measurement of the wage effect of unionization has challenged many researchers to date. While it is commonly observed that union workers receive higher average wages than non-union workers, the estimated wage differentials attributed to the effect of unionization alone have ranged from 9% to 51%, depending on the data and methodology used.¹⁷

This analysis does not attempt to isolate the earnings differentials attributable to unionization. To do this, many factors would need to be taken into consideration. Thus, the question of whether unionization benefitted women cannot be answered definitively. This section simply highlights some of the changes in union and non-union hourly earnings between 1981 and 1986. Observed differences in hourly earnings cannot be attributed entirely to unionization and the collective bargaining process.

One method of illustrating the changing relationship between union and non-union hourly earnings is to show one set of earnings as a percentage of the other for the two study years (Table 10). Within the service sector, for women working year-round, the gap between the two was greater in 1986 than in 1981; non-union as a proportion of union hourly earnings fell from 79% in 1981 to 73% by 1986. For both years, managerial and professional occupations recorded the least difference between union and non-union hourly earnings; on average, non-union earnings were 92% of union earnings in 1981 and 85% in 1986.

In almost all cases, average hourly earnings in 1981 and 1986 were higher for union workers than non-union workers (Table 11). For the most part, women in unionized jobs maintained average hourly earnings slightly above the rate of inflation.¹⁸

The most notable change between 1981 and 1986 was in the average hourly earnings of part-time workers, both unionized and non-unionized. For example, in 1986 average hourly earnings of year-round, part-time workers in managerial and professional occupations were higher than those of their full-time counterparts. This may be explained, in part, by contract negotiations involving part-time workers.

Table 10
Ratio of Non-union to Union Average Hourly Earnings

	Women with one year-round job					
	All occupations		Managerial and professional		Clerical	
	1981	1986	1981	1986	1981	1986
	%					
Service sector	79	73	92	85	87	80
Public services	87	88	92	96	92	86
Business services	96	81	--	95	92	78
Consumer services	83	77	--	70	77	79
Full-time	80	74	92	82	85	79
Part-time	77	72	94	100	99	84

Source: Survey of Work History, 1981; Labour Market Activity Survey, 1986.

Table 11
Average Hourly Earnings of Female Paid Workers in 1986 Dollars

	Women with one year-round job					
	All occupations		Managerial and professional		Clerical	
	1981	1986	1981	1986	1981	1986
	\$					
Service sector						
Union	12.08	12.53	14.13	14.32	10.54	10.98
Non-union	9.53	9.17	13.05	12.23	9.16	8.80
Public services						
Union	12.70	12.93	14.21	14.40	10.62	10.73
Non-union	11.04	11.35	13.03	13.86	9.74	9.22
Business services						
Union	10.74	12.69	--	13.04	10.53	11.90
Non-union	10.26	10.25	--	12.41	9.67	9.25
Consumer services						
Union	9.61	9.15	--	12.91	10.30	9.97
Non-union	7.98	7.07	--	9.03	7.94	7.83
Full-time						
Union	12.15	12.49	14.30	14.19	10.62	11.01
Non-union	9.74	9.19	13.20	11.57	8.98	8.72
Part-time						
Union	11.62	12.72	13.19	14.97	10.00	10.80
Non-union	8.92	9.11	12.45	14.94	9.86	9.06

Source: Survey of Work History, 1981; Labour Market Activity Survey, 1986.

At least four major unions representing almost a quarter of a million working women (the Canadian Union of Public Employees (CUPE); the Federation of Social Affairs Inc. (FSA); Service Employees' International Union (SEIU); and the Ontario Nurses Association (ONA)) have negotiated, for some of their membership, a percentage payment in lieu of sick leave for part-time workers. Similarly, for employee health and welfare plans, CUPE, SEIU and ONA have negotiated payment in lieu of benefits for part-time workers.

As White (1983) points out, when payments in lieu of vacation and other benefits are included, part-time workers in some contracts could earn up to 22% more per hour than full-time workers. The impact of such negotiated benefits provides some explanation for the apparently higher average hourly earnings in 1986 for certain unionized part-time workers compared with unionized full-time workers.¹⁹ The corresponding benefits received by full-time workers do not appear in the wages calculation.

Non-unionized part-time workers in managerial and professional and clerical occupations also earned more than their full-time counterparts (Table 11). Employment standards negotiated by trade unions often have a broader impact on workers in general. This spillover effect cannot be easily quantified, though it undoubtedly exists, particularly in tight or highly unionized labour markets. In fact, research findings suggest that some employers offer increased wages to forestall unionization (Starr, 1973).

Differences in average hourly earnings between full-time and part-time workers and between union and non-union workers may also reflect differences in the mix of jobs held by women in each of these groups. For example, the broad classification "clerical" encompasses a wide range of occupations – including secretaries, stenographers, bank and finance clerks,

office machine and electronic data processing equipment operators – each probably commanding a different hourly wage rate. Not only would each group (union, non-union, part-time, full-time) contain a different mix of occupations, but also the composition of occupations within each group would probably have changed over time. Thus, differences in aggregate average hourly earnings between union and non-union jobs are not entirely due to collective bargaining. Industrial restructuring and changes in occupations between and within industries affect the distribution of union and non-union jobs and, consequently, the rate of unionization and the average hourly earnings of each constituent group.

Conclusion

Among women holding one year-round job in the service sector, the number of unionized jobs, both full-time and part-time, did increase over the 1981-1986 period. But high unionization rates were still found predominantly in public service industries. Though some union growth was evident in business services and consumer services, women in both industry groups still had relatively low unionization rates in 1986, especially when compared with women in public services.

Unionization of year-round part-time workers has increased. Also, average hourly earnings for some part-time workers may be higher, compared with their full-time counterparts, because of payments in lieu of benefits in certain contracts. Such changes reflect a growing recognition of the part-time work force as a major component of the Canadian labour market.

Finally, unionized women in the service sector with one year-round job appear to have earned on average more per hour than their non-union counterparts. But, as already noted, these earnings differences cannot be entirely attributed to the collective bargaining process. □

Alternative unionization measures

The unionization rate is the proportion of workers who are members of labour unions among a specified group of workers. This rate, and modifications of it, can be derived from several data sources.

1. Returns from labour unions are provided to Statistics Canada under the Corporations and Labour Unions Returns Act (CALURA). These data are published annually and account for all labour unions in Canada with 100 or more members. Unionization rates can be calculated from CALURA data using the Labour Force Survey (LFS) annual average number of paid workers in Canada as the denominator.

Women in the service sector

	Paid workers*	Union members	Unionization rate
	'000	'000	%
CALURA 1981	3,777	803	24
CALURA 1986	3,846	1,151	30

* LFS annual average, 1981 and 1986.

2. The SWH and the LMAS permit wider analysis of socio-demographic data relating to unionized workers. Union membership or coverage by collective agreement in these household-based surveys is reported by the workers themselves or other household members. Unionization rates derived from the SWH and the LMAS job files tend to be slightly higher than those based on CALURA data partly because CALURA does not include workers in unions with fewer than 100 members, and partly

because, using SWH and LMAS data, all workers covered by collective agreement are included under the definition of unionized workers. The difference may also be related to the nature of the SWH and the LMAS, which report data on all jobs held by respondents throughout the year. Thus, one person could occupy more than one unionized job during this period and both jobs would be reported. As a corollary, however, persons with more than one job during the year may hold more non-union than union jobs, which could pull the unionization rate down.

Service sector jobs held by women

	Paid jobs	Unionized jobs	Unionization rate
	'000	'000	%
SWH 1981	4,715	1,221	26
LMAS 1986	5,713	1,726	30

3. Researchers interested in the volume of work done by unionized workers can derive a measure from the SWH and the LMAS job file data to calculate the number of hours worked by unionized employees as a proportion of total hours worked in the year. To obtain more intuitively meaningful data, aggregate hours can be converted into full-time equivalent (FTE) jobs. This is done by dividing aggregate hours by the total number of hours for a full-year, 40-hour week.

From 1981 to 1986 the aggregate volume of work done by women in the service sector with unionized year-round jobs increased (for both full-time and part-time jobs) as did their share of the total work done.

Women in the service sector

	Total FTE jobs		Year-round FTE jobs		Year-round unionized FTE jobs	
	'000	%	'000	%	'000	%
1981						
Total	2,697	100	1,819	67	685	25
Full-time	2,326	100	1,618	70	633	27
Part-time	371	100	201	54	51	14
1986						
Total	3,039	100	1,930	64	864	28
Full-time	2,576	100	1,702	66	780	30
Part-time	463	100	228	49	85	18

Notes

¹ Walsh (1983) in reference to eight European countries and the United States notes the scarcity of data on trade union membership, particularly female membership, but states that, "traditionally unionization amongst women has been relatively low in all countries" (p.195). Many sociological and economic reasons have been put forward to account for the low rates of unionization for women. See, for example, White (1980) and Baker and Robeson (1986).

² Statistics Canada collects data each year on union membership in Canada under the Corporations and Labour Unions Returns Act (CALURA). The Act requires reports from all unions operating in Canada that have 100 or more Canadian members. Largely because of the minimum membership criterion, the Annual Report of CALURA (71-202) does not provide a complete picture of union membership in Canada, but does nevertheless indicate major trends in union membership. Labour Canada also conducts an annual survey of labour organizations with 50 or more members. The data are published in the *Directory of Labour Organizations in Canada*. CALURA data show a drop in union membership for 1982; Labour Canada data, collected in the month of January, show the drop in 1983.

³ Due to amendments to CALURA in 1981, 99 unions (representing over 352,000 workers) were added to the data in 1983. Since several of these unions were organizations of teachers and nurses, just over 50% of the added membership in 1983 were women.

⁴ Paid worker jobs exclude self-employed work and unpaid work. They include hourly paid, salaried and commissioned positions.

⁵ Full-time jobs are defined in the SWH and LMAS as 120 hours or more of work per month. Part-time jobs are those that involve less than 120 hours of work per month. Respondents were asked to report usual hours worked. "Casual" or "temporary" part-time workers work less than full-time weekly hours on an intermittent or short-term basis, whereas "regular" or "permanent" workers work less than full-time weekly hours but on a continuing basis. White (1983), using SWH data, examined unionization rates for part-time workers based on duration of employment. Of women who had worked for up to three months, only 9% were unionized, whereas of those who had worked year-round, 21% were unionized.

⁶ The SWH did not differentiate union members from workers covered by a collective agreement who were not union members. Consequently, even though the LMAS does make the distinction, for comparison all respondents covered by a collective agreement were included with union members as "unionized workers". In fact, those covered by a collective agreement, but who are not union members, were only a small proportion of all paid workers. In 1986, 4% of women in the service sector with one year-round, paid worker job and covered by a collective agreement were not union members.

⁷ The 1981 SWH data were re-coded using the 1980 Standard Industrial Classification (SIC) to be comparable with the 1986 LMAS data. A total of 17,000 women employed in one year-round job could not be classified by industry from the re-coded SWH data.

⁸ The service sector was subdivided into three broad industry groups: **Public services** includes government services; educational services; health and social

Notes

services; and religious organizations. **Business services** includes transportation and storage; communication (including postal service); utilities; wholesale trade; finance and insurance; real estate operators and insurance agents; business service industries; and membership organizations (excluding religious). **Consumer services** includes retail trade; accommodation, food and beverage services; amusement and recreational services; personal and household services; and other services.

⁹ The 1967 Public Service Staff Relations Act led to the transformation of federal department employee associations into collective bargaining units.

¹⁰ The following occupations are included in the broad managerial and professional group: managerial and administrative; natural sciences; engineering and mathematics; social sciences and related fields; religion; teaching; medicine and health; and artistic, literary, recreational and related occupations. Clerical occupations include, stenography and typing; bookkeeping and accounting; office machine and electronic data processing equipment operators; material recording, scheduling and distributing; library, file and correspondence clerks; and others such as hotel clerks and travel clerks.

¹¹ In his study of unionization in Canadian banks, Lowe (1981) concluded that the greatest obstacle to bank unionization was fear of management reprisal (p. 889).

¹² The drop in total certifications in 1983 has been attributed to the public and quasi-public services where only 47 units were certified in 1983 compared with 96 in 1982. The increase in certifications in 1984 was largely because of the high number of part-time units certified in the public and quasi-public services, and in the retail industry (Kumar et al., 1985, p. 225).

¹³ The SWH data were originally coded using the 1971 Occupational Classification Manual but, to be comparable with the LMAS data, were re-coded using the 1980 Standard Occupational Classification (SOC).

¹⁴ The number of women in the service sector with one clerical job only and employed for part of the year also fell by 7% over the same period.

¹⁵ As well as pay equity and other concerns relating to wages and benefits for working women, unions are also placing emphasis on such non-monetary issues as affirmative action, sexual harassment, flexible working hours, maternity leave and day care programs.

¹⁶ Both the SWH and the LMAS offered respondents flexibility in the method of reporting earnings data. For example, while some respondents knew their hourly wage rate, others found it easier to report weekly or annual earnings. The identical question was asked in both surveys: "What was ...'s usual wage or salary before taxes and other deductions from this employer?" The dollar amount and the relevant unit of time (per hour, per week, every two weeks, per month and so on) were recorded. To standardize the data, all earnings were converted to hourly rates by means of the work schedule questions. For example, if a daily rate of pay was reported, the amount was divided by the number of hours worked each day. The reliability of hourly earnings data is therefore dependent both on the accuracy of the monetary amounts specified and the reported work schedule information.

¹⁷ Recent studies that have attempted to measure the effect of unionization on wage rates include work by Maki and Christenson, 1980; MacDonald and Evans, 1981; MacDonald, 1983; Robinson and Tomes, 1984; Simpson, 1985; Kumar and Stengos, 1985; and Evans and Ondrack, 1986.

¹⁸ Average hourly earnings for 1981 were converted to 1986 dollar equivalents using the consumer price index (CPI) annual average. Since the 1981 index value is 100 and that of 1986 is 132.4, the 1981 dollars were simply multiplied by 1.324 to correspond with 1986 dollar values.

¹⁹ Differences in average hourly earnings could also be related to different methods of reporting work schedules and earnings. For example, a respondent may report a total annual salary, but just the most recent work schedule. In this case high average hourly earnings could result if, during the year, the respondent held the same job but changed from full-time to part-time hours.

References

Baker, M. and M.-A. Robeson. "Trade Union Reactions to Women Workers and Their Concerns," in *Work in the Canadian Context*. K.L.P. Lundy and B. Warme, (eds.), Butterworths, Toronto, 1986, pp. 296-309.

CALURA. *Annual Report of the Minister of Supply and Services Canada under the Corporations and Labour Unions Returns Act, Part II - Labour Unions*. Statistics Canada (71-202), December 1988.

References

- Commission of Inquiry into Part-Time Work in Canada.* Ottawa, 1983.
- Christensen, S. and D. Maki. "The Union Wage Effect in Canadian Manufacturing Industries," *Journal of Labor Research*. Vol. 2, 1981, pp. 355-367.
- Evans, M.G. and D.A. Ondrack. "The Effect of Unionization on Wages: Some Canadian Evidence," *Industrial Relations*. Vol. 41, No. 3, 1986, pp. 572-577.
- Kumar, P., M.L. Coates, and D. Arrowsmith. *The Current Industrial Relations Scene in Canada, 1985*. Industrial Relations Centre, Queen's University, 1985. Also volumes in the same series for 1986 and 1987.
- Kumar, P. and T. Stengos. "Measuring the union relative wage impact: a methodological note," *Canadian Journal of Economics*. Vol. 18, 1985, pp. 182-189.
- Labour Canada. *Directory of Labour Organizations in Canada*. Bureau of Labour Information, Ottawa, 1988.
- Lowe, G.S. "Causes of Unionization in Canadian Banks," *Industrial Relations*. Vol. 36, No. 4, 1981, pp. 865-893.
- MacDonald, G. "The size and structure of union-non-union wage differentials in Canadian industry: corroboration, refinement and extension," *Canadian Journal of Economics*. Vol. 16, 1983, pp. 480-485.
- MacDonald, G. and J. C. Evans. "The size and structure of union-non-union wage differentials in Canada," *Canadian Journal of Economics*. Vol. 14, 1981, pp. 216-231.
- Maki, D. and S. Christenson. "The union wage effect re-examined," *Industrial Relations*. Vol. 35, 1980, pp. 210-230.
- Marchak, P. "Women Workers and White-Collar Unions," *Canadian Review of Sociology and Anthropology*. Vol. 10, No. 2, May 1973, pp. 134-147.
- Menzies, H. *Women and the Chip. Case Studies of the Effects of Informatics on Employment in Canada*. The Institute for Research on Public Policy, Montreal, 1981.
- Myles, J., G. Picot, and T. Wannell. *Wages and Jobs in the 1980s: Changing Youth Wages and Declining Middle*. Research Paper Series No. 17, Social and Economic Studies Division, Statistics Canada, July 1988.
- Robinson, C. and N. Tomes. "Union wage differentials in the public and private sectors: a simultaneous equation specification," *Journal of Labor Economics*. Vol. 2, 1984, pp. 106-127.
- Simpson, W. "The impact of unions on the structure of Canadian wages: an empirical analysis with microdata," *Canadian Journal of Economics*. Vol. 18, 1985, pp. 164-181.
- Starr, G.F. *Union-Nonunion Wage Differentials in Ontario: A Summary*. Research Branch, Ontario Ministry of Labour, Toronto, December 1973.
- Walsh, K. *Strikes in Europe and the United States*. St. Martin's Press, New York, 1983.
- Weeks, W. "Collective Bargaining and Part-Time Work in Ontario," *Industrial Relations*. Vol. 33, No. 1, 1978, pp. 80-91.
- Weiermair, K. *The Labour Market and the Service Sector*. The Fraser Institute, Vancouver, 1988.
- White, J. *Women and Unions*. Canadian Advisory Council on the Status of Women, Ottawa, 1980.
- White, J. *Women and Part-Time Work*. Canadian Advisory Council on the Status of Women, Ottawa, 1983.

Chart reference

Data for the charts are taken from the Survey of Work History, 1981 and the Labour Market Activity Survey, 1986.

Taking Their Leave

Dave Gower

In the average week of 1988, nearly 2.5 million of Canada's 12 million employed were off work. Of these, about 900,000 were absent the entire week. Employees can be absent from work for many reasons; for those away part of the week, the most common causes are illness, public holidays and family responsibilities. In contrast, vacation accounts for the largest proportion of people absent the entire week, especially during summer. In 1988, for example, nearly 1.5 million workers were on vacation in the average summer week.

Vacations are an important aspect of employment, enhancing the employee's quality of working life but also increasing costs borne by employers. In a different light, vacations are good for the economy because of money spent on travel, meals, accommodation and recreational consumer goods.

This study uses Labour Force Survey (LFS) data to investigate trends in vacation absences since the Second World War. It also looks at recent patterns by industry, age and sex, seniority and work schedule.¹ Because the proportion of workers on vacation varies widely over the year (Table 1), the focus is on summer and winter

vacations. Summer – not surprisingly, the most popular time for vacation – is represented by the average week in the July-August period. Winter, which is of interest because of the Canadian climate, is defined as the average week in the January-February period. Only full-week vacations are considered in this study; these account for about 90% of all vacation time taken.

Table 1
**Workers on Vacation by Month,
1984-1988 Average**

	Away full week	Away part week
Reference week in:	% of workers	
January	1.7	0.7
February	2.2	1.0
March	4.5	1.4
April	2.3	1.0
May	2.2	1.7
June	2.8	1.4
July	15.9	2.1
August	11.9	2.1
September	2.6	1.1
October	2.5	1.2
November	1.9	1.0
December	1.3	0.8
Average	4.4	1.3

Source: Labour Force Survey.

The "average week" is perhaps an unusual perspective for the study of vacation patterns. For example, in the average week of July and August, about 14% of workers are on vacation. This

Dave Gower is with the Labour and Household Surveys Analysis Division of Statistics Canada. He can be reached at (613) 951-4616.

The LFS reference week

The LFS focuses on the activities of respondents during one week of each month (normally the week containing the 15th day). People who have a job during this reference week but are absent because of vacation are classified as "on vacation".

Because the LFS reference week falls mid-month, the survey does not pick up vacations taken earlier or later in the month. In most cases, the reference week should be typical of other weeks in the month, but there are exceptions.

Most notably, vacations taken during the Christmas season and in late June (after school ends) are probably under-represented in the LFS data. The reference weeks for the summer months (July and August) would also miss the

vacation peak at the end of July and the beginning of August.

Also, factors such as the "March break" can affect the timing of vacation. The March data appear erratic because the timing of the school break varies – sometimes hitting the LFS reference week, sometimes not. For example, the number of Ontario workers on full-week vacation jumped from 102,000 in March 1983 to 293,000 in March 1984.

Similarly, some large companies, or even whole industries (for example, the construction and motor vehicle manufacturing industries), have fixed vacation dates which apply to many of their workers. The timing of these group vacations may "play tag" with the LFS reference week. To minimize this variability, most of the data have been averaged over five years.

measure is not the same as the proportion of workers who take a vacation at any time during the summer. The latter would obviously be much higher than 14%. The use of the "average week" is dictated by the data source used in this study. (For more details, see the above note.)

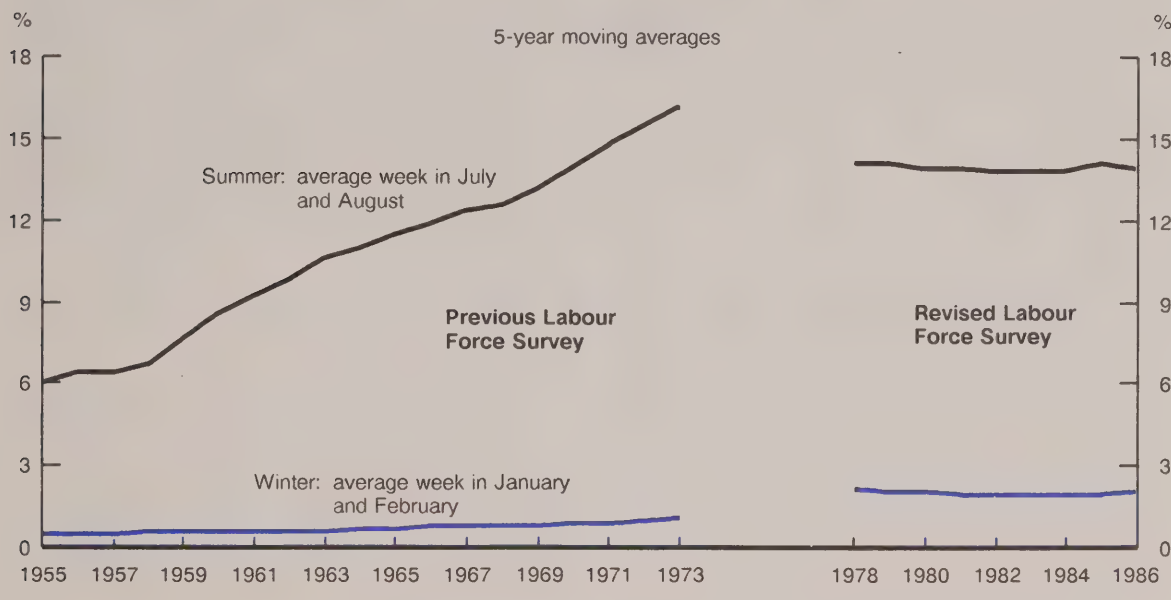
Long-term trends

During the '50s, '60s and early '70s, vacations became steadily more common in both winter and summer. Why did this occur? Starting in the 1940s, mandatory vacation provisions for employees began to appear in provincial and federal labour laws. The minimum vacation period was increased from an initial one week per year to two or more weeks per year during the '60s and '70s. At the same time, unions strove to improve vacation provisions in contracts.

LFS vacation data, available since the early 1950s, clearly show an increasing proportion of workers on vacation through to the mid-70s. There are two remarkable developments in addition to the upward trend in vacations from the '50s through the early '70s. First, there is a sudden drop in the vacation rate in the mid-70s (see chart). This is due to a major revision of the LFS in 1976. The revision resulted in a decline in the proportion of workers recorded as on vacation. At about the same time, however, the *trend* in vacation rates also began to flatten out. While the drop in the level was clearly caused by modifications to the survey procedures, it appears that the change in trend would have occurred anyway. In other words, if the original survey had continued past the mid-70s, a levelling off in the percentage of workers on vacation would still have been observed.

Percentage of Employed on Vacation

Vacation trends went up from the 50's to the 70's, then levelled off.



Special groups

Vacation patterns differ widely among various worker groups. Three groups warrant particular attention: self-employed persons, students and teachers.

The *self-employed* – people who own and operate a business, farm or professional practice – are less likely to take vacations in the summer than paid workers. In the average summer week, about 8% of the self-employed are on vacation compared with 14% of paid workers; the difference in rates is somewhat reduced in the winter.² Among self-employed persons, the impact and even the meaning of "vacation" can vary. For example, someone working alone might have to sacrifice income to take a vacation from work, whereas the owner of a business with employees may well be able to take an absence from work without monetary loss.

Employed full-time students also have a lower vacation rate than other workers. During the summer months, most full-time students are out of school and those who have a summer job are unlikely to take time off for vacation. For example, in the average summer week of the 1984-1988 period, 4% of all employed students were on vacation from their job, compared with 13% of other workers. Furthermore, about seven out of ten vacationing students were not paid during their absence, compared with just over one in ten non-students.

Another group with unusual patterns is *teachers and postsecondary instructors*. Almost 70% of these workers were on vacation in the average summer week, although this varied with the level of school taught (Table 2). Teachers also tend to have much longer vacations than other people. More than three-quarters of all people reporting vacations lasting five weeks or more were teachers.

Table 2
Proportion of Teachers* on Vacation,
Average Week of July and August 1988

	Employed	Full-week vacation
	'000	%
Total	457	67
Elementary grades	171	82
Secondary grades	88	88
University level	70	22
Other teachers	128	57

Source: Labour Force Survey.

* Teachers are regarded by the LFS as employed in the summer if they say they have a job for the fall.

Because of their distinctive vacation patterns, the self-employed, students and teachers have been excluded from the remainder of the study.

Vacation patterns by industry

Vacation rates vary substantially by industry (Table 3). The highest summer vacation rates occur in the education sector, even when teachers are excluded. (Non-teaching staff includes office workers, maintenance personnel and administrators.) Well behind the education sector are the manufacturing, and health and welfare industries.

At the opposite end of the scale, industry sectors with low vacation rates in summer include agriculture, accommodation and food, personal services and construction. The low rates in these sectors may reflect the levels of vacation entitlements, as well as a summer seasonal peak of activity. The figures for the construction industry omit some persons affected by mandatory industry-wide holidays (see note on LFS reference week).

Winter vacation rates, while universally lower than summer rates, have a somewhat different pattern by industry. Agriculture and trade, with low summer

rates, have winter vacation rates close to the average. Conversely, winter vacation rates are below average in the education sector. So to some degree winter vacation patterns compensate for differences in summer vacations.

In most industries, the majority of vacationers are paid for their time off. Industries with a high proportion of unpaid vacations are agriculture, construction, personal services, and accommodation and food services.

Who takes vacations?

The proportions of men and women on vacation are similar, both in summer and in winter, regardless of age (Table 4). However, the incidence of vacations increases rapidly by age for workers between the ages of 15 and 44. Compared with 15-24 year-olds, people aged 35-44 are more than twice as likely to be on vacation in the summer.

The percentage of workers on summer vacation declines slightly beyond the age of 45, but the incidence of winter vacations is much higher. Indeed, the winter vacation rate for workers aged 55 and over is nearly twice the rate for those aged 35-44. Furthermore, this "age gap" in winter vacation rates has widened over time.

The low vacation rates for young people may be partly due to the industries in which they work: young people tend to work in the service sector, where the rates are low. However, the differences by age are so much greater than those by industry that some other factors must also be at work. One possible factor is job seniority. Young people have relatively low seniority, and in many establishments vacation entitlements rise with seniority. Indeed, both the frequency and length of vacations rise with increasing tenure (Table 5).³ This finding applies to both summer and winter vacations.

Table 3
Vacation Patterns by Industry, 1984-1988 Average

	All paid workers*	Away full week		
		Total	Paid	Not paid
	'000		%	
Average week of July and August				
All industries	8,960	13.5	11.6	1.8
Agriculture	137	3.9	2.8	1.1
Other primary	264	13.3	11.2	2.1
Manufacturing	1,912	16.0	14.6	1.3
Construction	483	8.8	6.6	2.1
Transport, communication and utilities	811	13.2	12.2	0.9
Trade	1,487	11.4	9.6	1.8
Finance, insurance and real estate	605	12.2	10.6	1.6
Education (excluding teachers)	262	34.0	26.8	7.1
Health and welfare	908	15.5	13.2	2.3
Services to business management	383	10.9	9.1	1.8
Personal services	132	11.0	7.1	3.9
Accommodation, food and beverage	456	7.2	4.7	2.5
Public administration	782	14.1	13.3	0.9
Average week of January and February				
All industries	8,379	1.9	1.5	0.3
Agriculture	89	1.8	1.1	0.8
Other primary	223	1.9	1.6	0.3
Manufacturing	1,816	1.4	1.2	0.2
Construction	337	1.9	1.1	0.8
Transport, communication and utilities	771	2.8	2.6	0.2
Trade	1,433	1.8	1.4	0.4
Finance, insurance and real estate	584	2.0	1.6	0.3
Education (excluding teachers)	297	1.3	1.1	0.2
Health and welfare	852	2.3	1.8	0.5
Services to business management	369	1.6	1.3	0.3
Personal services	127	1.2	0.7	0.5
Accommodation, food and beverage	421	1.7	1.1	0.6
Public administration	745	2.2	2.1	0.2

Source: Labour Force Survey.

* Excludes teachers and full-time students.

Could a difference in the proportion of part-time workers also play a role in depressing the vacation rates among young people? The vacation rate for part-time workers is slightly lower than the rate for full-time workers. However, this can be

explained by differences in job tenure. In fact, looking at individual tenure groups, part-timers actually have slightly higher vacation rates than full-timers, although they are less likely to have their vacation paid.

Table 4
Vacation Patterns by Age and Sex of Worker, 1984-1988 Average

	All paid workers*	Away full week		
		Total	Paid	Not paid
	'000		%	
Average week of July and August				
Both sexes	8,960	13.5	11.6	1.8
15-24 years	1,605	7.1	5.7	1.4
25-34 years	2,915	12.1	10.5	1.6
35-44 years	2,160	17.1	15.0	2.1
45-54 years	1,380	16.6	14.4	2.2
55 years and over	900	15.7	13.4	2.4
Men	5,068	13.5	12.3	1.2
Women	3,891	13.4	10.7	2.7
Average week of January and February				
Both sexes	8,379	1.9	1.5	0.3
15-24 years	1,439	1.2	0.9	0.3
25-34 years	2,691	1.7	1.4	0.3
35-44 years	2,055	1.8	1.5	0.3
45-54 years	1,317	2.3	1.9	0.4
55 years and over	877	3.2	2.6	0.6
Men	4,642	1.8	1.6	0.2
Women	3,737	2.0	1.5	0.5

Source: Labour Force Survey.

* Excluding teachers and full-time students.

Unpaid vacations

Persons on paid vacation outnumbered those on unpaid vacation by more than six to one. Women, students, part-time workers and people in service sector jobs are most likely to be on unpaid leave.

The meaning of unpaid vacation is hard to interpret. Some casual or on-call employees receive vacation pay on each pay cheque or as a periodic lump-sum payment, in lieu of a regular pay cheque while they are on vacation. Thus, while their vacation absences may be unpaid, some compensation would still have been received.⁴

Unpaid vacations tend to be of longer duration than paid ones. This is true for full- and part-time workers, in both summer and winter. It is also true for both sexes and for persons at different stages of job tenure, although for workers with tenure of up to six months the difference is slight. A look at the distribution of vacations by duration reveals that very long absences – say those in excess of six weeks – tend to be unpaid. Excluding teachers, only 1.3% of paid vacations were seven weeks or longer, compared with 11% of unpaid vacations. Sometimes a long spell of unpaid leave may be an "earned" privilege. The fact that unpaid vacations are not much longer than paid ones among workers who are new on the job supports this interpretation.

Table 5
Summer Vacation Patterns by Job Tenure, 1984-1988 Average

Work schedule by tenure	Away full week, July-August average		Average length of vacation *	
	Total	Paid	Paid	Not paid
	% of paid workers		weeks	
All paid workers**	13.5	11.6	1.8	2.9
1-6 months	4.7	2.7	1.5	1.7
7-12 months	10.0	7.5	1.6	2.9
1-5 years	12.2	10.2	1.7	3.0
6-10 years	15.6	13.9	1.8	3.4
11 years and over	20.2	18.7	2.0	3.5
Full-time	13.5	12.2	1.8	2.8
1-6 months	4.6	2.9	1.5	1.6
7-12 months	9.6	7.8	1.6	2.7
1-5 years	12.0	10.6	1.6	3.0
6-10 years	15.5	14.3	1.8	3.4
11 years and over	20.3	19.1	2.0	3.5
Part-time	12.6	6.5	2.0	3.0
1-6 months	5.0	1.7	1.7	2.1
7-12 months	12.9	5.4	1.9	3.1
1-5 years	13.8	6.7	2.0	3.0
6-10 years	17.1	10.3	2.2	3.4
11 years and over	19.0	11.7	2.1	3.5

Source: Labour Force Survey.

* Based on the duration up to the reference week, not on the length of completed vacations.

** Excludes teachers and full-time students.

Concluding comments

Clearly, from the 1950s to the mid-1970s the proportion of workers taking vacations rose substantially. Although this trend levelled off after the mid-70s, it does not appear to have resulted from shifts in the characteristics of jobs or of the persons occupying these jobs.

For example, it is unlikely that an employment shift to industries with lower vacation rates caused the trend to flatten. Even if the industry mix had not changed over the past 13 years, the tailing off of the trend in vacation absences would still probably have occurred.⁵

Age distribution and job tenure did not cause the stabilizing of the vacation trend either. With the aging of the baby-boom generation, the proportion of workers

under 25 years declined during the '70s and '80s. Since young people tend to have low levels of job tenure and thus few vacation entitlements, their diminishing share of the work force should have resulted in a higher vacation rate – but in fact it did not.

Finally, the levelling off cannot be explained by the rise in part-time employment: the difference between the percentage of part-time and full-time workers on vacation is too small.

In the absence of other evidence, one might conclude that current vacation entitlements meet the needs of most workers and that attention is now being focused on other workplace issues – among them, job security, medical plans and child care. Thus the period of rapid change observed from the '50s through the mid-70s may have come naturally to a close. □

Postscript: Vacation patterns of working couples

In the summer of 1988, there were about 2.7 million married couples with both partners employed. How many took vacations at the same time? Of the 2.7 million couples, 15.3% (417,000) had at least one of the partners on vacation in the average summer week. In 3.3% of the cases only the husband was on vacation; in a further 4.7%, the wife was on vacation but not the husband; and in 7.3%, both were on vacation. In other words, of the 417,000 couples with at least one

vacationing partner, only 48% had both partners on vacation at the same time.

Vacation Patterns of Working Couples*, Average Week of July and August 1988

	Husband not on vacation	Husband on vacation
Wife not on vacation	2,312,000 84.7%	90,000 3.3%
Wife on vacation	127,000 4.7%	200,000 7.3%
Total number of couples = 2,728,000		

* Includes common-law marriages; excludes cases where either partner is a teacher.

Notes

¹ The definition of vacation used in this article does not necessarily imply travel. Workers who stay at home during their vacation are included in the study. Conversely, retired persons who are travelling – for example, to Florida for the winter – may describe themselves as "on vacation", but would not be included because they do not have jobs to return to.

² Self-employed persons (defined here as owners of either incorporated or unincorporated businesses) have increased their share of the work force in the past few decades. Although these people take fewer summer vacations than paid workers, this does not help explain the levelling-off in vacation trends that occurred during the 1970s, because the numbers involved are too small: between 1976 and 1988, the increase in self-employment appears to have altered the percentage of all employed persons on summer vacation by less than 0.1 percentage point.

³ In the LFS, a difference between job tenure and seniority could occur. For example, a person working for a large company who moved between branches might

report a change in employer if the branches have different corporate names. In this event, job tenure as measured by the LFS would indicate that the person had started a new job. However, employment benefits linked to seniority would not likely be affected.

⁴ Also, unpaid vacations may not always be voluntary. For example, an employee in a small business may have to take an unpaid absence if the business closes while the owner takes a one- or two-week vacation break. In the LFS, a respondent's perception of the nature of the absence would influence whether he or she is coded as "on vacation" (employed) or as "temporary layoff" (unemployed).

⁵ To investigate the effect of a change in industry distribution on the vacation rate, the 1984-1988 percentage of workers on vacation in the various industry groups was multiplied by the distribution of employment in the 1977-1981 period. The result of these calculations represents the 1984-1988 vacation percentage standardized to the 1977-1981 industry distribution of employment.

Chart reference

Percentage of Employed on Vacation: Labour Force Survey (former and revised). The data plotted represent the mid-point year of five-year moving averages.

Job Ads: A Leading Indicator?

Cynthia Haggar-Guénette

Help-wanted advertisements are placed in newspapers by employers to attract potential workers to vacant jobs. These classified section advertisements are used by Statistics Canada to create the help-wanted index, an indicator of labour demand.

Although many economic indicators are available to researchers, the help-wanted index is Canada's only regularly published measure of employers' attempts to attract additional labour. As such, the index reflects changes in labour demand, which in turn signal changes in the level of economic activity. Statistics Canada publishes a monthly and an annual average help-wanted index for Canada and five regions.¹ The monthly index for Canada is examined here.

This study evaluates the performance of the help-wanted index as a leading indicator of economic and labour market conditions in Canada from 1971 to 1988. First, the performance of the help-wanted index during the last three business cycles is assessed. Second, the ability of the index to signal changes in the labour market is examined using the employment ratio and the unemployment rate as key indicators of labour market conditions.

Cynthia Haggar-Guénette is with Labour Division. She can be reached at (613) 951-4052.

Before turning to the performance of the help-wanted index in these two areas, the concept of help-wanted advertising and the properties of the help-wanted index as a leading indicator are described.

Help-wanted advertising and the index

Newspapers provide employers with a convenient forum to advertise job openings at local and national levels. By placing help-wanted ads in newspapers employers reach the widest audience of potential job seekers (Walsh, 1975).

At the same time, help-wanted ads are a valuable information resource for persons looking for work. Newspapers sold at corner stores or delivered to residences provide daily, low-cost information on immediate job openings to job seekers. Those who read help-wanted ads are mainly unemployed persons looking for work, persons who are interested in keeping an eye on available jobs for future reference (for example, full-time students), or employed persons looking for better job opportunities.

Some employers use help-wanted ads frequently; some employers do not use them at all; and still others use a combination of ads and other recruitment methods. Consequently, jobs advertised in the classified sections of newspapers do not represent all vacant jobs in the labour

Origins of the help-wanted index

1920s - In the United States, William A. Berridge uses help-wanted advertisements to develop a measure of labour demand. This measure is later updated and published by the Metropolitan Life Insurance Company.

1960s - The United States Conference Board assumes responsibility for producing the help-wanted index and improves its methodology. The U.S. index is derived from a monthly count of help-wanted advertisements published in 51 U.S. city newspapers.

1970s - In 1973, Finance Canada collects want-ad data and publishes quarterly averages of the help-wanted index for

Canada from 1962 on. The Canadian index is derived from a measurement of the column space devoted to help-wanted advertising.

- In 1974, Statistics Canada assumes responsibility for the help-wanted index and continues publishing quarterly averages with only minor changes to the methodology.

1980s - In 1983, Statistics Canada begins to publish the help-wanted index on a monthly basis.

- In 1989, Statistics Canada revises the methodology of the help-wanted index. Help-wanted advertisements are counted rather than measured. The revised index is only available back to 1981.

market. Classified ads only are used to produce the help-wanted index. All "career section" ads are excluded.

Most classified ads are used to help fill the least attractive jobs - low-paying, unprestigious, high-turnover jobs - and commission sales positions. But ads are also used to advertise some of the hardest to fill jobs - those requiring specialized training or skills (Oughtred, 1979).

Very little research has been done on the distribution of job ads by occupation or industry. A Canadian survey of job vacancies, discontinued by Statistics Canada in the late 1970s, found most job vacancies were in semi-skilled, low-skilled, and trades and crafts occupations (Gower, 1973). Another study of help-wanted ads, based on the classified section of a Nova Scotia

newspaper, found little change in the number of job ads by occupation over the 23 years from 1959 to 1982. Nearly half of the jobs advertised during this period were in the service sector (VanBlarcom, 1982).

The importance of the help-wanted index lies in its ability to signal changes in the demand for additional labour over time. An upward or downward movement in the help-wanted index represents a change in the amount of help-wanted advertising placed by employers within a given month. Since help-wanted ads represent the future hiring intentions of employers, and the need for additional workers is often the result of an increased demand for goods and services, movements in the index should signal changes in the level of economic activity.

The timeliness of the help-wanted index in fact makes it one of the first signals of change in economic activity. It is published immediately after the collection of job ads is completed and is available much sooner than key macro-economic indicators such as the gross domestic product, industrial output, and the consumer price index.

The business cycle

Business cycles are characterized by periods of economic recession and recovery. They reflect substantial changes in consumer, business and government spending on goods and services, and in foreign purchases of Canadian exports.

Movements in the help-wanted index signal changes in the staffing requirements of employers who must adjust production schedules in response to the demand for goods and services. Thus, the help-wanted index acts as a barometer of businesses' intentions to expand or reduce their work forces (Boschan, 1966).

Preston (1977) describes the relationship between the index and business cycles as follows. Before a recession, employers begin experiencing a slowdown in sales and new orders. Reacting to this, some employers who use newspaper advertising begin to remove job ads and reduce hiring. Thus, the help-wanted index drops off slowly.

During a recession, as the demand for goods and services drops off rapidly, more businesses are forced to reduce production through temporary lay-offs and shorter hours of work for employees. The help-wanted index continues to decline sharply.

At the beginning of a recovery, help-wanted advertising usually remains low while employers cautiously wait to hire workers until a recovery is certain. Before placing ads in the newspaper, employers will

increase employees' hours, recall laid-off labour, or hire through informal methods. As the economy returns to previous levels of production and the demand for goods and services continues to increase, the number of job seekers may begin to diminish. Businesses, needing additional workers to meet increased demand, resort to help-wanted ads pushing the index to higher and higher levels.

A leading indicator of recession?

American studies have found that cyclical patterns in help-wanted advertising mirror swings in the business cycle (Preston, 1977). The U.S. help-wanted index reflects movements in the level of economic activity and so acts as an early indicator of recession, exemplified by its decline several months before the onset of recession.

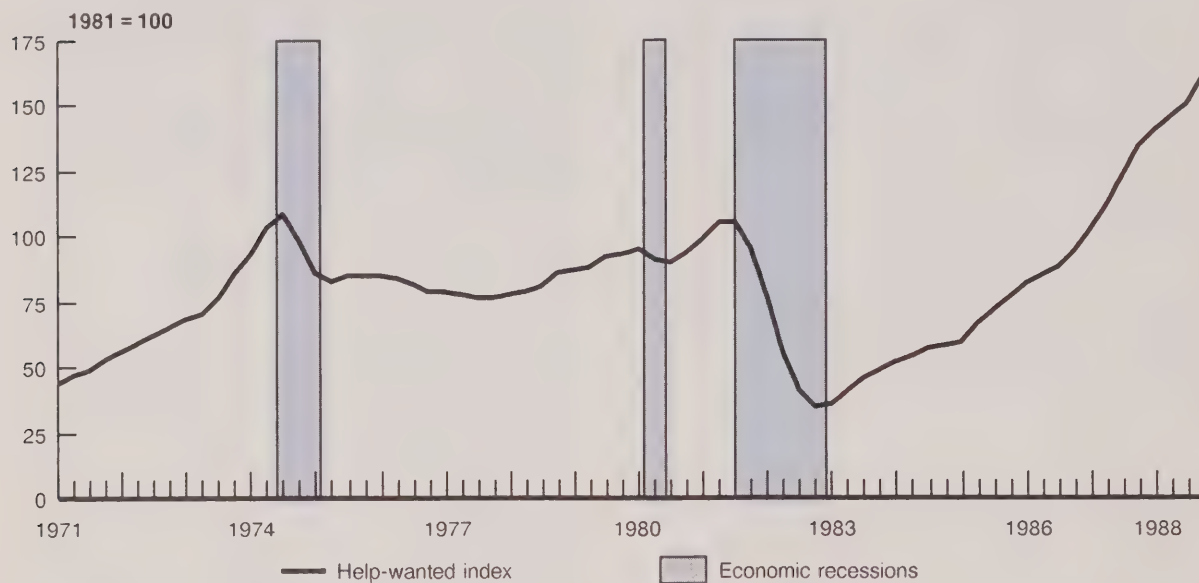
Declines in the American index consistently occurred three to seven months before the five post-war recessions in the U.S. between 1953 and 1975. Following each recession in the U.S., increases in the help-wanted index occurred either at the end of the recession or lagged the economic recovery by one to four months.

The Canadian help-wanted index has responded well during the last three business cycles. Since 1971, it has signalled two recessions, declining sharply at the onset of each and continuing to drop until recovery starts.

The index maintained a steady climb in the early 1970s, peaking at the start of the 1974-1975 recession. It showed several false starts during the weak expansionary period in the second half of the 1970s, peaking one month before the 1980 recession.² The next expansionary phase was short-lived, lasting only one year, with the index peaking two months before the 1981-1982 recession.

The Help-wanted Index (trend-cycle)

The index declines sharply at the onset of each recession and continues to drop until the recovery starts.



In summary, the Canadian help-wanted index has led the onset of the last two recessions by a short lead time of one to two months. The index lagged the start of the first two recoveries by one month, and was coincident with the start of the last recovery. Further research is needed to establish how well the index performs with other macro-economic indicators.

The labour market

This section examines the performance of the help-wanted index as a leading indicator of labour market conditions. It assesses the relationship between the index and two key labour market indicators: the employment ratio and the unemployment rate. Job openings advertised today should indicate changes in the labour market tomorrow; vacant jobs appearing in newspapers this

month will most likely be filled by workers hired in upcoming months. Thus, movements in the index should signal changes in employment and unemployment.

The employment ratio

The employment-population ratio (commonly referred to as the employment ratio), expresses the number of people employed as a percentage of the working-age population, that is, persons aged 15 years and over.

The employment ratio has several properties that make it a key indicator of labour market conditions. First, the definition of employment is straightforward, encompassing all persons who did any work at all or who were absent from work. Second, since the working-age population does not fluctuate substantially over time, it provides a stable denominator upon which to compare

employment levels. In this way, movements in the employment ratio represent changes in employment levels rather than in population growth (Green, 1977). Lastly, although increases in the employment ratio should correspond with declines in unemployment, both indicators may increase at the same time when there is substantial growth in the labour force.

The employment ratio is an appropriate indicator for comparison with the help-wanted index, because the index reflects changes in employers' demands for additional labour while the ratio reflects changes in the existing levels of employment. Thus, increases in the help-wanted index should signal upcoming changes in the addition of labour.

We also examine the relationship between movements in the help-wanted

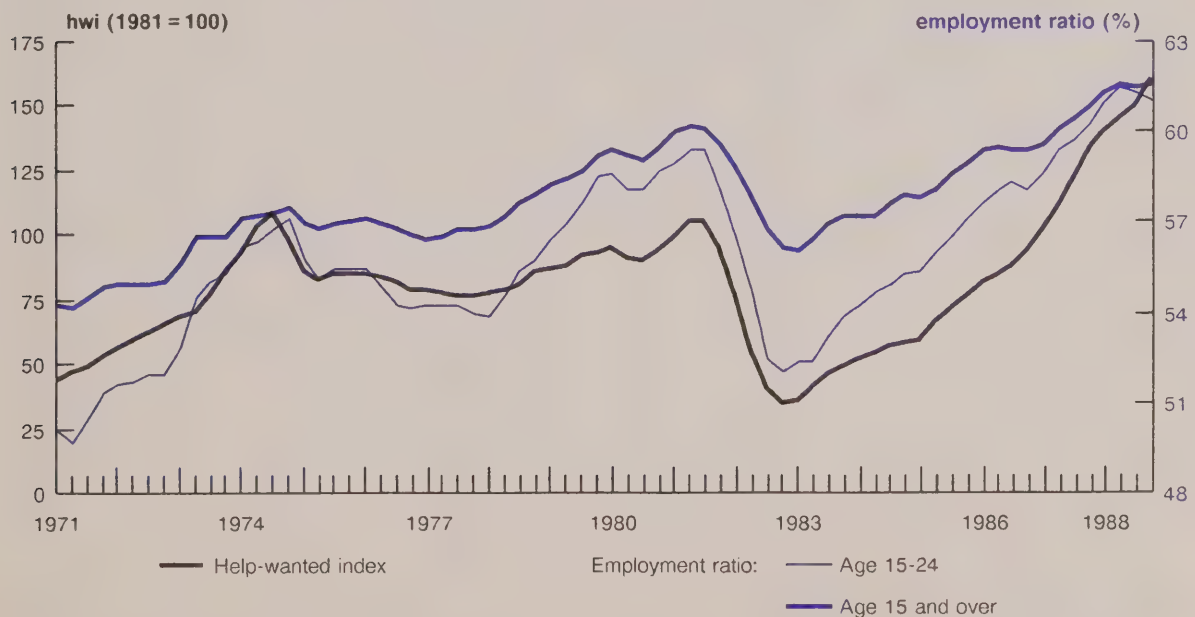
index and the employment ratio of men aged 25 and over, women aged 25 and over, and young people aged 15 to 24 years. If movements in the index are more closely related to one group than another this could suggest that job ads are used more by certain age and sex groups. (See note on data analysis at the end of the article.)

A leading indicator of employment?

The help-wanted index was not a leading indicator of growth or decline in employment between 1971 and 1988. Instead, it appeared to be a coincident indicator, meaning that levels in the help-wanted index changed at the same time as movements in the employment ratio. This pattern was particularly evident for young people.

Help-wanted Index and Trend-Cycle of the Employment Ratio

During periods of growth in labour demand, the employment ratio rises, especially for the young.



A close relationship between movements in the help-wanted index and the aggregate employment ratio was apparent throughout the 1970s and 1980s. Thus, when the demand for additional labour grew, so did the proportion of employed persons in relation to the working-age population.

The relationship, however, varied for men and women aged 25 and over, and young people aged 15 to 24 years. During the 1970s and 1980s, the help-wanted index had a weak relationship with the employment ratio of men. It had a closer relationship with the employment ratio of women, and a very close relationship with the employment ratio of young people.

One reason for these age and sex differences may be the contrasting movements in the employment ratios of men, women and young people over this period. The employment ratio of men has slowly declined during the last twenty years despite economic upturns, whereas the employment ratio of women has continued to rise unaffected by economic downturns.

For young people, the employment ratio has tended to follow economic upturns and downturns. At the onset of economic recessions, the employment ratio for young people declined sharply; it climbed rapidly during economic recoveries (Wong, 1978). This relationship is close probably because

Table 1
Cross-correlation Coefficients: the Help-wanted Index and the Employment Ratio, 1971-1988

HWI leading employment ratio by --- month(s)	Help-wanted index and the employment ratio				Number of observations
	Total	Men aged 25 and over	Women aged 25 and over	Youth (aged 15-24)	
8	.66	.09*	.31	.73	208
7	.69	.09*	.33	.77	209
6	.72	.08*	.34	.80	210
5	.74	.07*	.36	.82	211
4	.76	.06*	.38	.85	212
3	.78	.05*	.39	.86	213
2	.79	.03*	.40	.87	214
1	.79	.02*	.42	.88	215
0	.79	-.00*	.43	.88	216
-1	.78	-.00*	.42	.87	215
-2	.77	-.00*	.41	.86	214
-3	.75	-.01*	.40	.84	213
-4	.73	-.01*	.39	.83	212
-5	.71	-.02*	.38	.80	211

Source: Help-wanted index; Labour Force Survey.

* These coefficients are not significant at the 1% confidence level. All remaining coefficients are significant at the 1% confidence level, meaning the chances are about 99% that an association exists between the index and the employment ratio. For further information, see note on data analysis at the end of the article.

employers placing classified ads in newspapers are looking for workers with specific characteristics, such as willingness to accept entry-level jobs, low pay, or little job security. These are often characteristics of young workers.

Another reason for the age and sex differences may be that men, women and young workers use different job search methods (Clemenson, 1987). For example, between 1977 and 1986, the most frequently used method of job search among the unemployed was contacting employers directly: this method was used more by men than women. The second most frequently used method of job search was looking at job ads and women used this method more than men.

The unemployment rate

The unemployment rate represents the number of unemployed as a percentage of the labour force. (Unemployed persons are those actively looking for work, on lay-off, or waiting to start a job in the next four weeks.) This rate is a key indicator of labour market conditions since it reflects the interaction between the supply of and the demand for labour. A reduction in the excess supply of labour occurs when additional labour is hired to increase the production of goods and services. In contrast, the unemployed grow in number when employers reduce production and work forces.

Unemployed workers form the largest group of both job seekers and users of help-wanted ads. The unemployed make up three-quarters of all job seekers. Help-wanted ads are second only to contacting employers directly as their most frequent source of job search.

The unemployment rate is an appropriate indicator for comparison with the help-wanted index because changes in employers' demand for workers should precede movements in unemployment. A

rapid drop in the help-wanted index should indicate a future increase in the unemployment rate as employers lay-off workers because of a decline in demand; a rapid increase in the help-wanted index should signal a future decline in the unemployment rate.

A leading indicator of unemployment?

The help-wanted index was not a leading indicator of growth or decline in unemployment during the 1970s. This lack of a relationship may be partly explained by the continuous rise in the unemployment rate for all groups over this decade despite an economic upturn.

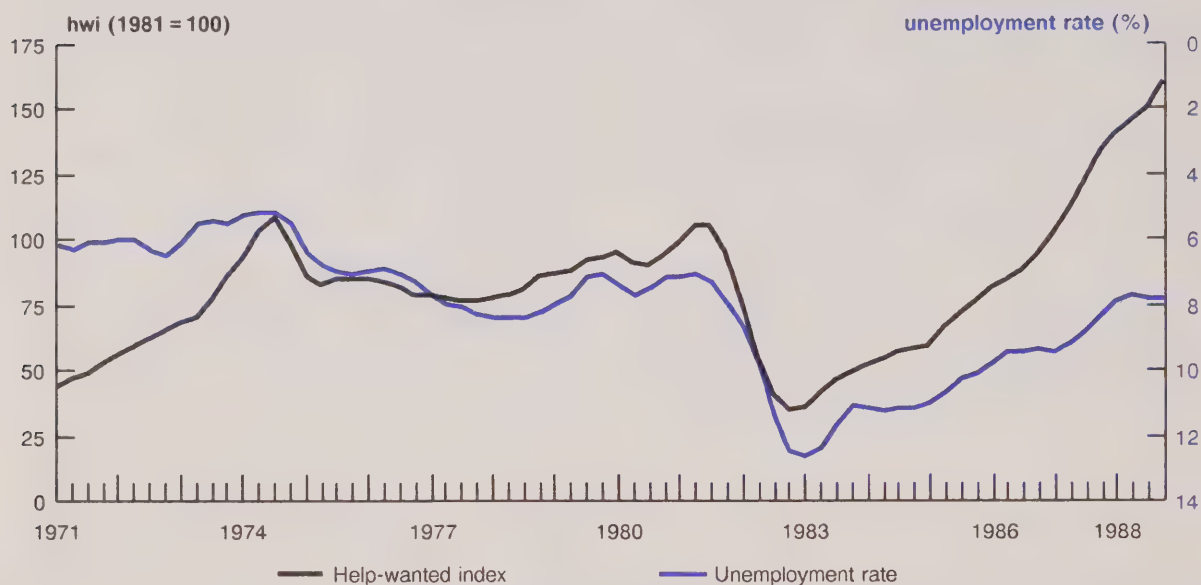
During the 1980s, however, changes in the level of the help-wanted index appeared to lead movements in the aggregate unemployment rate by three to five months. This relationship was negative, meaning that as the help-wanted index moved up, the unemployment rate moved down three to five months later.

The index appeared to lead movements in the unemployment rate of women by six or more months; for unemployed men, the index appeared to lead by five or six months. For young people, there was no discernible lead pattern, which suggests that movements in the youth unemployment rate occurred quickly and in immediate response to changes in labour demand. The average duration of unemployment for a young person in 1987 was 14 weeks (Cohen, 1989). This is much shorter than the average five months duration of unemployment for adults.

The longer lag that occurs before the unemployment rate for men and women drops may be partly explained by a longer job search period. Possibly, unemployed men and women over age 25 take more time to find a job that suits their needs, matches their qualifications, or provides their desired income.

Help-wanted Index and Trend-Cycle of the Unemployment Rate (inverted)

During periods when the demand for labour declined, the unemployment rate increased.



In the 1980s, changes in the level of help-wanted advertising and the unemployment rate had a much closer association for all groups. Unemployed persons' use of help-wanted ads compared with other job search methods increased substantially after the 1981-1982 recession (Clemenson, 1987).

Conclusion

The help-wanted index was a weak leading indicator of changing economic conditions in Canada over the 1971-1988 period. However, it did signal the onset of the last two economic recessions. The principal advantage for researchers using the help-wanted index is that it is available much

earlier than other macro-economic indicators.

The index was a coincident indicator of movements in the employment ratio during the 1970s and the 1980s. It was strongly associated with the employment ratio of young people. This suggests that employers looking for additional workers through classified job ads appear to be attracting young workers.

The help-wanted index was a leading indicator of movements in the unemployment rate by three to five months in the 1980s, though these results differed by age and sex. In short, the index has some value as a leading indicator of the condition of the labour market during the 1980s. □

Table 2

Cross-correlation Coefficients: the Help-wanted Index and the Unemployment Rate, 1981-1988

HWI leading unemployment rate by --- month(s)	Help-wanted index and the unemployment rate				Number of observations
	Total	Men aged 25 and over	Women aged 25 and over	Youth (aged 15-24)	
8	-.86	-.87	-.89	-.81	88
7	-.90	-.88	-.89	-.85	89
6	-.92	-.89	-.89	-.88	90
5	-.93	-.89	-.87	-.91	91
4	-.93	-.87	-.85	-.93	92
3	-.93	-.85	-.82	-.94	93
2	-.92	-.83	-.79	-.95	94
1	-.90	-.79	-.75	-.95	95
0	-.88	-.76	-.71	-.94	96
-1	-.85	-.72	-.68	-.93	95
-2	-.82	-.68	-.64	-.91	94
-3	-.79	-.64	-.59	-.89	93
-4	-.75	-.59	-.53	-.87	92
-5	-.70	-.53	-.48	-.83	91

Source: Help-wanted index; Labour Force Survey.

For further information, see note on data analysis at the end of the article.

Data analysis

Three data series were analyzed for the period 1971 to 1988: the monthly series of the help-wanted index, the employment ratio, and the unemployment rate.

A trend-cycle was produced for each data series to facilitate more direct comparisons between series. The trend-cycle program removes the effects of seasonality and irregularities from the time series. This procedure was especially appropriate for the help-wanted index, which has large month-to-month fluctuations in its seasonally-adjusted data.

A cross-correlation technique was used to test for an association between the help-wanted index and the employment ratio, and between the index and the unemployment rate.

Cross-correlation matches the curves of two data series and establishes a "goodness-of-fit", expressed numerically as a cross-correlation coefficient r . This coefficient is the standardized covariance of the two series.

An example of the formula is:

$$r = \frac{\sum_t (HWI_t - \overline{HWI})(U_t - \overline{U})}{\sqrt{\sum_t (HWI_t - \overline{HWI})^2 \sum_t (U_t - \overline{U})^2}}, \text{ where}$$

HWI is the help-wanted index, and

U is the unemployment rate

The cross-correlation coefficient has a range of +1.0 to -1.0. If the distributions of two series are skewed in the same direction and have the same degree of skewness, then $r=+1.0$. If the distributions of two series are skewed in opposite directions and have the same degree of skewness, then $r=-1.0$.

Leading and lagging relationships are established by producing coefficients for "shifting" time periods. The help-wanted index data series was shifted relative to the employment ratio and unemployment rate series, reflecting one-month to eight-month leads and one-month to five-month lags. For example, the index for January 1971 was correlated with the employment ratio for February, March, and then April 1971 to create one-month, two-month and three-month leads by the index. The match or "best fit" is established where the coefficient is highest.

Changes in methodology

The old help-wanted index performed well in reflecting long-term trends in labour demand. But short-term fluctuations made the interpretation of current trends in the old index difficult. This prompted revision of the index methodology. The revised index came into effect in January 1989.

Derived from a sample of 18 major city newspapers, the old help-wanted index is available for the years 1962 to 1988. Help-wanted ads were collected from Saturday newspapers published during the week of the Labour Force Survey (usually the week including the fifteenth day of the month). Only classified ads were used to calculate the index. Career-section ads, positions-wanted and newspaper carriers were excluded from the index.

The basic unit of analysis of the old index was the measurement of column space. Briefly, the column space devoted to help-wanted advertising was measured in inches and compared with the average column space measured in the base year 1981. The raw index was then multiplied by the appropriate city, regional, and national 1981 population weights. (For a technical description of the old index, see *The Help-wanted Index 1987*, April 1988.)

The revised index, derived from a sample of 22 major city newspapers, is available from 1981 onward. As with the old index, the Saturday newspapers are collected during the Labour Force Survey reference week and only classified ads are used. The basic unit of analysis is a count of the number of help-wanted ads appearing in the classified sections of newspapers. The procedure for weighting the revised index is the same.

In-house research, conducted to examine movements in the revised and old index between 1981 to 1988, has found that the revised index is a superior indicator of trends in labour demand. Results have shown that the revised index:

- has fewer short-term variations than the old index;
- showed changes in direction at an earlier date than the old index;
- has been a stronger leading indicator of movements in the employment ratio and unemployment rate.

For a brief study on the differences in the behaviour of the revised and old index, see *The Help-wanted Index 1988*, May 1989.

Notes

¹ The five regions are the Atlantic Provinces, Quebec, Ontario, the Prairie Provinces, and British Columbia.

² The reference dates for the 1979-1980 recession have changed as a result of data revisions, placing the onset of this recession in February 1980, not November 1979 (Cross and Roy-Mayrand, 1989). For a discussion of the methodology in determining business cycle turning points, see Cross, 1982.

References

Boschan, C. "Job Openings and Help-wanted Advertising as Measures of Cyclical Fluctuations in Unfilled Demand for Labor," *The Measurement and Interpretation of Job Vacancies*. National Bureau of Economic Research, New York, 1966, pp. 491-518.

Clemenson, H. "Job Search Methods of the Unemployed, 1977-1986," *The Labour Force*. Statistics Canada (71-001), October 1987.

Cohen, G. "Youth for Hire". *Perspectives on Labour and Income*. Statistics Canada (75-001E), Summer 1989.

Cross, P. "Special Study: The Business Cycle in Canada 1950-1981," *Current Economic Analysis*. Statistics Canada (13-004E), Vol. 2, No. 3, March 1982.

Cross, P. and F. Roy-Mayrand. "Statistics Canada's New System of Leading Indicators," *Canadian Economic Observer*. Statistics Canada (11-010), Vol. 2, No. 2, February 1989.

Gower, D. "The Occupational Composition of Job Vacancies," *Canadian Statistical Review*. Statistics Canada (11-003E), April 1973.

Green, C. "The employment ratio as an indicator of aggregate demand pressure," *Monthly Labor Review*. U.S. Department of Labor. April 1977, pp. 25-32.

Oughtred, A.W. *Project Number 6: The Extent to Which Job Ads can Provide Information on Occupational Demand*. Statistics Canada and Employment and Immigration, Unpublished paper, July 1979.

Preston, N. *The Help-wanted Index: Technical Description and Behavioral Trends*. U.S. Conference Board, New York, 1977.

Statistics Canada. *The Help-wanted index 1987*. (71-204), April 1988.

Statistics Canada. *The Help-wanted index 1988*. (71-204), May 1989.

VanBlarcom, B. *The Canadian Help-wanted Index as an Economic Indicator*. M.A. Thesis, Department of Economics, Acadia University, Nova Scotia, April 1985.

Walsh, J., M. Johnson and M. Sugarman. *Help-wanted: Case Studies of Classified Ads*. Olympus Publishing, Salt Lake City, Utah, 1975.

Wong, F. *Employment-population ratio*. Labour Force Survey Division Research Paper 16. Statistics Canada, February 1978.

Chart references

The Help-wanted index (trend-cycle): based on data published in *The Help-wanted index 1988* and reference dates for business cycles listed in the *Canadian Economic Observer*, February 1989.

Help-wanted index and trend-cycle of the employment ratio: based on data published in *The Help-wanted index 1988* and *Historical Labour Force Statistics: Actual Data, Seasonal Factors, Seasonally Adjusted Data* (71-201).

Help-wanted index and trend-cycle of the unemployment rate (inverted): based on data published in *The Help-wanted index 1988* and *Historical Labour Force Statistics: Actual Data, Seasonal Factors, Seasonally Adjusted Data* (71-201).

"Discouraged Workers"

Ernest B. Akyeampong

Discouraged workers are defined in many countries, including Canada, as people who want work and yet are not job-hunting because they believe suitable employment is not available.¹ Their belief may derive from a variety of factors, including a shortage of jobs in their locality or line of work; perceived discrimination for reasons such as age, race, sex and religion; a lack of necessary skills, training or experience; or a chronic illness or disability.

"Discouraged workers" are part of a larger group said to be "on the margins" of the labour force – that is, people who, regardless of their reasons, are not looking for a job even though they want to work.² Discouraged workers are distinguished from others on the margins in that their reasons for not looking are fundamentally related to their perception that they would be unable to secure a suitable job.

There are several inter-related reasons for the interest in discouraged workers. For example, these persons tend to enter the labour force in an economic recovery and withdraw in a recession. The label "hidden unemployed", often assigned to discouraged workers, probably traces its origins to this behavioural factor. As well, the numbers of discouraged workers and of

unemployed generally move in the same direction during the business cycle and the seasons. (Both tend to rise in periods of low economic activity and vice versa.) Indeed, some suggest that discouraged workers should be included in the unemployment numbers because of the close association between these two variables.³

In Canada, information on the number and composition of the discouraged worker group originates from two main sources. One source is the monthly Labour Force Survey (LFS), which identifies persons who looked for work in the past six months but who have since stopped searching. The other source is the Survey of Job Opportunities (SJO), which is much closer in design to the approach used in many other countries. In this survey, all those expressing a desire for work and who are available for work are counted, irrespective of their past job search activity.⁴ Not surprisingly, the more restrictive LFS approach shows fewer discouraged workers: 38,000 in March 1989, compared with 70,000 from the SJO. The data contained in this study pertain to SJO results only.

Trends

The number of discouraged workers has shown itself to be sensitive to both cyclical and seasonal changes in economic activity. From a figure of around 101,000 in March 1981, the count almost doubled, in the wake

Ernest B. Akyeampong is with the Labour and Household Surveys Branch. He can be reached at (613) 951-4624.

Survey of Job Opportunities

Each March since 1979, Statistics Canada has conducted a supplement to the Labour Force Survey to identify the number and characteristics of persons who say they want work but are not actively seeking it. The survey provides information on why these persons are not looking for work, their recent labour market experiences, their future job expectations, and their willingness to move if a suitable job were offered. In addition to the annual observation in March, the survey was conducted during the month of September in 1981 and 1984.

Persons who report wanting a job may not be actively seeking one for a variety of reasons. These reasons fall into two general categories – **labour market-related** reasons (worker discourage-

ment, awaiting recall to a former job or awaiting replies to earlier job search efforts) and **personal and other** reasons (illness or disability, personal or family responsibilities, going to school, and so on).

The latest SJO results show that in March 1989, an estimated 179,000 persons reported that they wanted a job but were not seeking one for labour market-related reasons. Of these, 70,000 were discouraged workers. An additional 150,000 persons reported that they wanted work but remained outside of the labour force because of personal and other reasons unrelated to labour market conditions.

(Because of the growing interest in child care issues, the SJO has, since 1988, identified persons wanting work but not seeking it due to child care demands. For an analysis of these data, see Akyeampong, 1988.)

of the last recession, to 197,000 in March 1983. Since then, the number has declined and seems to have stabilized at around 70,000 over the last two years.

Similarly, a comparison of the data for March with that of September (see above note) shows that the number of discouraged workers tends to be high in the former and low in the latter. March is a period of generally low seasonal economic activity and high unemployment, and September is a period of generally high seasonal economic activity and low unemployment (Macredie, 1984).

Who are they?

With results from the surveys conducted in March 1979, 1983 and 1989, we shall briefly examine the extent to which the discouraged worker profile and the type of jobs desired have altered over the past decade. Both 1979

and 1989 were years of economic expansion, while the 1983 data reflect the effects of the last economic recession.

Compared with their share in the work force, young persons (15-24 years) and older persons (45 years and older) are over-represented among discouraged workers, accounting for 23% and 36% of the total, respectively, in 1989. These two age groups represented 19% and 26% of the labour force in March 1989. Over the decade, the younger group has seen its share of the discouraged worker total fall at the expense of the older group. This shift is due in part to changes in the age distribution of the population. Persons aged 25-44 years have maintained their proportion, at 41% (Table 1).

The discouraged worker group is almost equally split between men and women (48% versus 52% in 1989). During the last economic recession, however, the

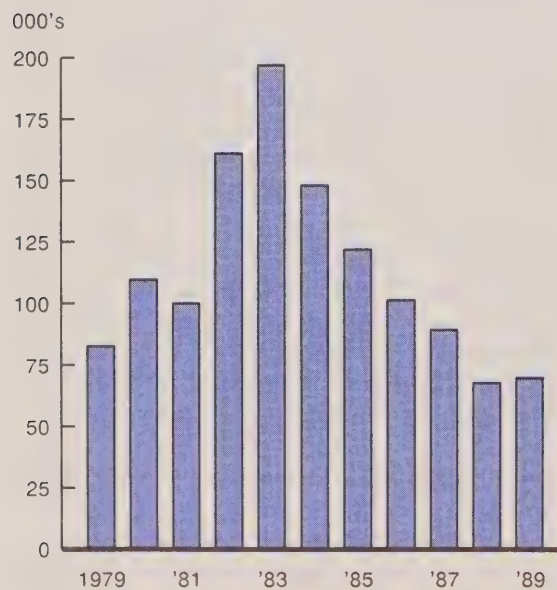
female share rose slightly to 56%. About three in every five discouraged workers are married.

Compared with the average worker, discouraged workers tend to be less educated. This is true for both the young and adults (25 years and older). In 1989, for example, about 84% of the adults and 97% of the young had no postsecondary education. Many of the young discouraged workers are recent high school drop-outs, with limited labour market assets.

Discouraged workers tend to be concentrated in regions experiencing high unemployment. In 1989, about one-third resided in the Atlantic provinces, and an equal number were found in Quebec (Table 2). Newfoundland, with only 2% of the national labour force, accounted for about

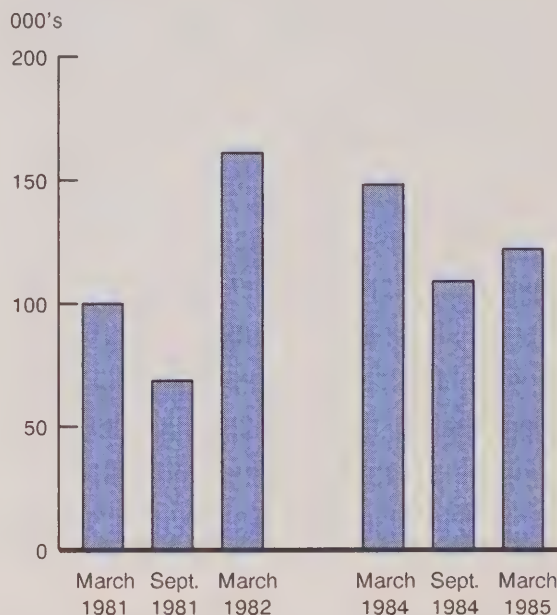
"Discouraged Workers": Business Cycle Effects, March 1979-1989

The number of discouraged workers rises in periods of low economic activity and vice versa.



"Discouraged Workers": Seasonal Effects

In March, when economic activity is low, the number of discouraged workers is high. The reverse is true in September.



19% (13,000) of the national total of discouraged workers, far greater than the share of the more populous but prosperous province of Ontario (12% or 8,000).

Finally, the increased job opportunities accompanying the sustained economic growth of the past six years appear to have had some effect on the type of jobs desired by discouraged workers. Compared with 1983, slightly higher proportions of these people wanted a full-time job (more than 30 hours per week), or a permanent job (lasting more than six months) in 1989. But the uneven geographical distribution of employment growth during this period has also had an impact. For example, in the high unemployment region of Atlantic Canada, close to one-quarter of the discouraged

Table 1
"Discouraged Workers": Selected Characteristics, March 1979, 1983 and 1989

	1979	1983	1989	1979	1983	1989
	'000	'000	'000	%	%	%
Total	83	197	70	100	100	100
Age						
15-24 years	28	57	16	34	29	23
25-44 years	34	80	29	41	41	41
45 years and over	21	59	25	26	30	36
Sex						
Male	41	86	34	49	44	48
Female	42	111	36	51	56	52
Marital status						
Married	48	114	44	57	58	63
Other	36	82	26	43	42	37
Education						
High school or less	74	169	61	88	86	87
Some postsecondary or higher	10	28	9	12	14	13
Job desired						
Full-time job	49	109	47	59	55	67
Part-time job	15	37	11	17	19	15
Either full- or part-time	19	52	13	23	26	18
Permanent job	56	129	46	67	65	66
Temporary job	5	9	--	6	5	--
Either permanent or temporary	22	59	21	27	30	30

Source: Survey of Job Opportunities.

workers in March 1989 indicated a willingness to move to another province if a suitable job were offered. In contrast, in the more prosperous province of Ontario, hardly anyone expressed such a desire to relocate. □

A data set containing national and provincial SJO results spanning the 1979-1989 decade can be obtained either on paper or IBM-compatible computer diskette at a cost of \$50. Requests should be addressed to the author.

Reprints of the studies "Persons on the Margins of the Labour Force" and "Women Wanting Work, but not Looking Due to Child Care Demands" are also available at \$6 a copy.

Table 2
Distribution of "Discouraged Workers" by Selected Geographical Regions, March 1979, 1983 and 1989

	1979	1983	1989	1979	1983	1989
	'000	'000	'000	%	%	%
Canada	83	197	70	100	100	100
Atlantic Region	26	41	25	31	21	36
Newfoundland	11	20	13	13	10	19
Prince Edward Island	2	1	--	2	1	--
Nova Scotia	5	7	4	6	4	6
New Brunswick	9	13	6	11	7	9
Quebec	29	79	22	35	40	32
Ontario	16	42	8	19	21	12
Prairie Region	5	18	8	6	9	11
Manitoba	2	6	--	3	3	--
Saskatchewan	--	4	2	--	2	3
Alberta	--	9	3	--	4	5
British Columbia	7	16	7	8	8	10
Census Metropolitan Areas	20	70	17	24	36	24
Montreal CMA	5	22	4	6	11	6
Toronto CMA	4	11	--	5	5	--
Non-metropolitan areas	63	127	53	76	64	76

Source: Survey of Job Opportunities.

Notes

¹ This is the definition generally used in several OECD member countries. For details, see *OECD Employment Outlook*, September 1987, pp. 210-212.

² The Australian Bureau of Statistics (1983) and the United Kingdom Department of Employment (1986) were among the first to introduce the notion of "marginal attachment" and "marginal activity" into the labour force lexicon (OECD, September 1987).

³ In addition to the officially published unemployment rate, Statistics Canada regularly produces alternative unemployment rates based on various labour market concepts and definitions. One of these measures takes discouraged workers into account (Jackson, 1987). For an analysis of why discouraged workers should not be counted as unemployed, see Macredie (1984). For a detailed comparative profile of these two groups, see Akyeampong (1987).

⁴ For a detailed comparison of the two data series, see Macredie (1984).

References

Akyeampong, Ernest B. "Persons on the Margins of the Labour Force," *The Labour Force* (71-001). Statistics Canada, April 1987.

Akyeampong, Ernest B. "Women Wanting Work But Not Looking Due to Child Care Demands," *The Labour Force*. April 1988.

Australian Bureau of Statistics. *Persons in the Labour Force, Australia (Including Persons who Wanted Work but who were not Defined as Unemployed)* (6219.0). July 1985.

Jackson, George. "Alternative Concepts and Measures of Unemployment," *The Labour Force*. February 1987.

Macredie, Ian. "Persons Not in the Labour Force: Job Search Activities and the Desire for Employment, September 1984," *The Labour Force*. October 1984.

Organization for Economic Co-operation and Development. *OECD Employment Outlook*. September 1987.

Chart references

"Discouraged Workers": *Business Cycle Effects*: Survey of Job Opportunities, 1979 - 1989.

"Discouraged Workers": *Seasonal Effects*: Survey of Job Opportunities, March and September, selected years.

Sources

A potpourri of information: survey news, including special surveys conducted as supplements to the Labour Force Survey; notes on research projects inside and outside Statistics Canada; recent publications and data releases; other items of news and future events.

Survey News

■ June 1989

Barriers to Advancement

In September 1988, the President of the Treasury Board announced the formation of a Task Force on Barriers to Women in the Public Service. The Task Force will gather data from men and women throughout the federal public service, and will examine all types of barriers including attitudes, education, training and experience. This information is being gathered by a variety of methods, including a major survey conducted by Statistics Canada, formal and informal interviews, and case studies.

The survey, entitled "Barriers to Advancement in the Public Service," is a key area of research. A sample for the survey was carefully selected to represent men and women from all departments and agencies, all groups and classification levels, and all geographic areas of the country. Questionnaires were sent to approximately 20,000 federal employees for completion by the end of June 1989.

Results of the survey will be incorporated in the report of the Task Force which will be presented to the President of the Treasury Board in the fall of this year. Statistical summaries will also be published by Statistics Canada after submission of the Task Force report.

For further information on the survey contact Jeanine Bustros at (613) 951-6802. For additional information on the Task Force, contact Barry Daniels, Research Director, Task Force on Barriers to Women in the Public Service, 2nd Floor, East Tower, L'Esplanade Laurier, Ottawa, Ontario K1A 0R5, or call (613) 995-8380. □

Changes to the Survey of Employment, Payrolls and Hours

The Survey of Employment, Payrolls and Hours (SEPH) – a national survey of business establishments providing detailed industrial data on numbers of employees, average weekly and hourly earnings, hours worked and overtime – will soon undergo a number of important changes in the production and dissemination of data.

■ SEPH is changing its sampling frame from the Business Register to the new Central Frame Data Base (CFDB). This new survey frame will feature improved coverage of the business universe. All business surveys at Statistics Canada will ultimately draw their samples from this

frame. It will also supply up-to-date industry, size and geographic classifications of businesses. The SEPH sample will be drawn from the CFDB beginning November 1989.

■ SEPH is also changing from the 1970 to the 1980 version of the Standard Industrial Classification (SIC). However, to prevent breaks in the data series during the transition to the new CFDB, SEPH will temporarily continue to publish estimates based on the 1970 SIC.

■ During the transition period, estimates will be derived from the month-to-month movements in the data reported by businesses which are in the sample in consecutive months. This "common unit" technique will help to ensure that data are not distorted by artificial movements due to the introduction of the new frame or to changes in survey operations.

■ Survey results for March 1990 onward will be based on the 1980 SIC. Monthly movements in the estimates will continue to be based on the "common unit" technique until the new production environment has stabilized.

■ SEPH plans call for the production of a consistent historical series based on the 1980 SIC. This historical series will extend back to January 1983. The more severe discontinuities in the currently available data will be corrected (for example, the 1987 change of survey frame and the shifts in employment and earnings levels caused by sample rotation). A special report containing a selection of historical data will be available at the time of the release.

■ The monthly publication *Employment, Earnings and Hours* (72-002) will be completely re-designed based on the results of a user survey conducted in 1988. The

revised publication will be smaller, featuring industry data at the major group level (2-digit SIC code) and higher aggregations for Canada, the provinces and territories. It will also contain seasonally adjusted data, selected historical data and, on occasion, notes or articles on technical issues such as seasonal adjustment, data quality, and analysis of topical data series. The planned release date of the revised publication is the end of May 1990. A significant price reduction is expected.

■ For users requiring additional data, detailed industry tabulations will be available from CANSIM or directly from the Labour Division on a subscription or ad hoc basis.

The dates given above represent the best estimates at the time of publication and are subject to change. For more information contact Howard Krebs at (613) 951-4063 or Pierre Prud'homme at (613) 951-4563. □

Update: Canada/U.S. Comparison

In June 1988, an article entitled "The Labour Market in the '80s: Canada and the United States" was published in *The Labour Force* (71-001). Comparisons were based on the Canadian Labour Force Survey and the U.S. Current Population Survey.

A revised data set, including results for 1988, is now available. The data set contains about 8,000 estimates on such variables as population, labour force, employment, part-time employment, unemployment, and long-term unemployment. It can be obtained on paper or on computer diskette in either LOTUS 1-2-3 or ASCII format. Technical documentation is provided with the data set, but users are advised to refer to the original article for

definitions and background explanations. A reprint of the original article is also included with the documentation. The package costs \$50.

Here are some highlights from the data set:

- During the recession of the early '80s, unemployment rose more steeply in Canada than in the U.S. Recently the gap between the Canadian and U.S. unemployment rates has been narrowing. In 1988, the Canadian rate was 2.2 percentage points higher, the smallest margin observed since 1983.
- The U.S. experienced stronger employment growth in the early stages of the recovery but, since 1985, Canada has taken the lead.
- From 1980 to 1988, the participation rate was higher in Canada than in the U.S., but changes in the participation rate over the period differed by sex. In particular, Canadian women entered the decade with a rate slightly below that of American women (51.0% vs. 51.5%). By 1988, Canadian women had the higher rate (57.7% vs. 56.6%).
- Part-time employment was more common among Canadian working women than their American counterparts (33.3% vs. 25.7%) in 1988.
- Both countries have witnessed rapid service sector expansion in the 1980s. However, employment growth rates within the service sector differed widely. For example, the 1980-1987 rise in business and financial services was much higher in the U.S. than in Canada (28% vs. 16%). From 1987 to 1988, this imbalance was somewhat reduced, as business and financial services employment increased 3.4% in Canada compared with 2.8% in the U.S.
- From 1987 to 1988, employment in the goods-producing sector increased more in Canada than in the U.S. (4.0% vs. 1.3%).
- Long-term unemployment was more widespread in Canada throughout the 1980-1988 period. In 1988, 20% of all unemployed Canadians had been seeking work for six months or more, compared with 12% of all unemployed Americans.
- In both countries, unemployed persons aged 45 or over were more susceptible to long spells of unemployment than were younger people. However, this difference was more pronounced in Canada.

To obtain a copy of the data set, contact Jamie Darch at (613) 951-0177. For further information on the content of the original article, contact Dave Gower at (613) 951-4616. □

Labour Market Activity Survey, 1987

The Labour Market Activity Survey for the calendar year 1987 was conducted in January 1988. This longitudinal household survey re-contacted respondents from the 1986 Labour Market Activity Survey. Where possible, those respondents who had relocated during the year were traced for interview at their new address. The data base now covers the labour market activity of each respondent for a two-year period.

The edited and weighted data file from the 1987 Labour Market Activity Survey was available for special tabulations in July 1989. The microdata tape and supporting documentation will be available sometime in August.

For further information, contact Richard Veevers at (613) 951-4617. □

A New Labour Market Data Guide

Have you ever wondered which data source would answer a particular labour market question? There's a new guide available to help you make the right choice. *Understanding Labour Market Data: A Guide to Choosing the Best Data Source For Your Needs* provides an overview of the major sources of employment, unemployment and earnings data available at Statistics Canada. Fourteen data sources are described:

- Labour Force Survey
- Survey of Employment, Payrolls and Hours
- Census of Population
- Survey of Consumer Finances
- Labour Market Activity Survey
- Survey of Job Opportunities
- Absence From Work Survey
- National Work Injuries Statistics Program
- Unemployment Insurance statistics
- Small area income estimates
- Labour income estimates
- Help-wanted Index
- Labour union returns (CALURA)
- Employer-sponsored pension plans

A profile of each of these sources is presented in a standardized format, briefly describing:

- what the survey is about
- who is surveyed
- the method of data collection
- the frequency of data collection
- the response rate
- the reference period
- the geographic detail
- the demographic information
- the main labour market information
- the timeliness of data release
- how far back the data series goes

- where the data can be found (publications, CANSIM and other sources).

A summary chart provides a comparative overview of all the data sources for quick, easy reference. The guide also contains a series of case studies showing which source, or sources, a user could choose to satisfy a particular need.

Available on request. For further information, contact Christine Campbell at (613) 951-4629. □

Collective Bargaining Information Sources

The 1988 edition of the reference guide *Collective Bargaining Information Sources*, produced by the Bureau of Labour Information at Labour Canada, contains an annotated bibliography of the major sources of information on collective bargaining and labour relations in Canada. It is divided into four sections:

- compensation and working conditions – describes sources on wages, salaries, benefits and working conditions
- labour relations – lists studies and sources of data on labour organizations, collective agreements, collective bargaining and dispute settlement processes, decisions of labour relations boards and work stoppages
- general economic and industrial relations indicators – lists studies and sources of data on the economy and labour relations
- labour legislation – presents the primary sources of information on labour legislation.

Sources of information are presented in alphabetical order by title in each section and the publication concludes with alphabetical indexes of authors and titles.

Copies of the guide (Labour Canada Cat. No. L160-3068/88E) can be obtained from the Publications Distribution Centre, Labour Canada, Ottawa, Ontario K1A 0J2, or by phoning (819) 994-0543. □

Labour and Household Surveys Analysis Division – Analytic Report Series*

The *Analytic Report Series* was established as a vehicle for in-depth studies on labour and incomes issues. The series is divided into two subject areas: income and labour. Six reports have been published to date:

Income Analytic Reports (13-588)

Changes in the Distribution of Wealth in Canada, 1970-1984

Results from three Surveys of Consumer Finances conducted in 1970, 1977 and 1984 are examined to identify changes in the distribution of wealth among Canadian households. The composition of wealth – home or business equity, the value of vehicles, other financial assets or debts – is analyzed according to family quintile groups based on income or wealth and the age of the family head.

(13-588, No. 1/Order No. 13-588)

* Compiled by Bruce Simpson, Publications Officer (613) 951-4628.

Pensions and Incomes of the Elderly in Canada, 1971-1985

This report examines changes in the income sources of Canada's elderly population. Based on the Survey of Consumer Finances, it focuses on private pension and investment income and examines trends in income since 1971. Also featured is a demographic profile of the elderly according to these income sources.

(13-588, No. 2/Order No. 13-548)

The Characteristics of Dual-earner Families

Over the past 20 years, it has gradually become the norm for a wife to have employment income. Between 1967 and 1985, the presence of wives with earnings increased from one-third to two-thirds of all families. This study looks at the widespread changes related to the wife's participation in the labour force. Using Survey of Consumer Finances data, this paper examines the links between occupation, education, fertility and marriage. It also discusses some of the issues affecting dual-earner families (for example, increased disposable income, demand for daycare).

(13-588, No. 3/Order No. 13-601)

Labour Analytic Reports (71-535)

Labour Market Activity of Disabled Persons in Canada

How likely is it that a disabled person will be active in the labour market? To what extent is this person's participation influenced by education and the degree of disability? This study draws upon data from the Canadian Health and Disability Survey (conducted in October 1983 and June 1984)

and offers a detailed look at the disabled population both in and out of the labour force.

(71-535, No. 1/Order No. 71-535)

The Decline of Unpaid Family Work in Canada

This study traces the long-term decline of unpaid family work and looks at recent trends in both agriculture and other industries. Demographic and job-related characteristics of unpaid family workers are examined in detail using current and historical Labour Force Survey results and data from other sources.

(71-535, No. 2/Order No. 71-519)

Results from a Special Survey of Employers

This study analyzes data from the Survey of the Self-employed, a supplement to the November 1986 Labour Force Survey. It presents information about self-employed persons who provided paid employment to others during 1986, and about their businesses. The report describes the socio-economic and demographic characteristics of the employers, their businesses and the work characteristics of their employees (for example, work schedules, and kind of work performed).

(71-535, No. 3/Order No. 71-532) □

How to order

These publications are available for \$24 each except for 13-588, No. 1 (\$12) and 13-588, No. 3 (\$25). Send orders to Publication Sales, Statistics Canada, Ottawa, Ontario K1A 0T6. Or, call toll free 1-800-267-6677 for a credit card order.

Income Estimates for Subprovincial Areas

Annual small area income data are published in *Income Estimates for Subprovincial Areas* (13-216). The latest edition of this publication, containing 1987 income data, will be available in September 1989 for \$26 (\$30 outside of Canada). The data series can also be accessed on CANSIM.

The publication presents intercensal income estimates for subprovincial regions, counties or census divisions, and census metropolitan areas. Tables display money income and its components. Money income and personal income, before and after taxes, are tabulated on an aggregate and per capita basis.

Thematic maps show subprovincial regions and counties or census divisions classified in terms of income levels and income growth rates relative to national levels and growth rates.

For further information, contact Horst E. Alter at (613) 951-6900. □

Labour Market Activity Survey Publications

The first publication in a new Labour Market Activity Survey *Analytical Studies* series is now available: *Wages and Jobs in the 1980s: Changing Youth Wages and the Declining Middle*, by J. Myles, G. Picot and T. Wannell. The study examines changes between 1981 and 1986 in the distribution of jobs by hourly wage rate, using data from the 1981 Survey of Work History and the 1986 Labour Market Activity Survey.

The results show increased concentration of jobs in two segments of the wage distribution – the bottom and the upper middle. Factors accounting for some of these changes are examined. Much of the

observed shift in the overall wage distribution is related to an economy-wide decline in relative wages paid to young workers and, to a lesser extent, an increase in the relative wages paid to older workers. A regional analysis of the changing wage distribution is also included.

Two further publications in the Labour Market Activity Survey's *Profile Series* were released in March: *Canada's Youth: A 1986 Profile of Their Labour Market Experiences* (71-207, \$10); and *Canada's Older Workers: A 1986 Profile of Their Labour Market Experiences* (71-207, \$10). These are the third and fourth publications in the *Profile Series*. The first two, released in 1988, profiled men and women.

For information on how to obtain the Labour Market Activity Survey publications, contact Richard Veevers at (613) 951-4617. □

Employment and Immigration Canada: Labour Force Development Strategy

Employment and Immigration Canada recently announced the Labour Force Development Strategy (LFDS) – a series of initiatives which will significantly expand and improve training and adjustment programs for Canadians. Highlights of the LFDS include a new entry level training program as well as changes to apprenticeship and an expansion of the co-operative education program; new programs for older and or displaced workers; and expanded training and employment assistance for UI and social assistance recipients.

Consultations are currently taking place between business, labour and other interested groups to determine how the

federal government can best design these new programs for unemployed Canadians.

These measures, along with changes to the UI program that provide for expanded and more flexible UI benefits for working parents and workers aged 65 and older, will be financed through a reallocation of \$1.3 billion in UI funds.

Elements of the new LFDS are described in *Success in the Works: A Policy Paper*. A background document entitled *Success in the Works: A Profile of Canada's Emerging Workforce* analyzes trends emerging in labour demand and supply in Canada and their implications for labour force training. These documents are available from Public Affairs, Employment and Immigration Canada. Contact: André Bouvier at (819) 994-6406. □

Employment Equity Data: An Overview

The Employment Equity Act was proclaimed in August 1986. It has two objectives. The first is to eliminate employment practices which result in employment barriers for four designated groups – women, aboriginal peoples, visible minorities and persons with disabilities. The second is to ensure that these groups achieve a representative degree of employment, taking into account their qualifications, eligibility and geographical distribution.

The Act obliges federally regulated employers and Crown Corporations with 100 employees or more to implement employment equity measures. They must also submit annual reports to Employment and Immigration Canada detailing the representation of the four target groups in specific occupational groups, salary ranges,

hirings, and promotions and terminations. The Act is subject to review in 1991 and every three years thereafter.

Responsibility for implementing employment equity legislation is shared by three federal agencies:

- Employment and Immigration Canada
- Treasury Board Secretariat
- Canadian Human Rights Commission

The role of Statistics Canada is three-fold: to ensure that the best possible benchmark labour force data exist to help define the nature of employment inequity in Canada; to provide statistical support for the design and evaluation of remedial programs pertaining to employment equity; and to provide consultation services on data for employment equity purposes.

Data from a variety of sources are required to support the administration of the Employment Equity Act. The key statistical requirement is for benchmark data to assist employers in evaluating, planning and implementing employment equity programs. These data are also required by federal departments responsible for the design, monitoring and enforcement of such programs.

The latest benchmark data, contained in the *Employment Equity Availability Report on Designated Groups*, were derived from the 1986 Census and the Health and Activity Limitation Survey (HALS). The 1986 Census served as the source of data for women, aboriginal peoples and visible minorities. HALS, which was conducted as a post-censal survey in 1986, generated statistics on persons with disabilities. Together, these two data sources provide employers with information about designated group members within given labour market areas, including their labour force activities and occupations. Used in tandem with their own internal work force data, employers are able to assess their

performance and develop realistic goals and timetables for achieving a representative work force.

The 1986 Census and HALS are not the only sources of data used for employment equity purposes. Supplements to the Labour Force Survey are also used to gather employment equity information for program monitoring and policy development. For example, a series of questions were added to the 1988 and 1989 Labour Market Activity Survey (LMAS) to identify members of visible minorities and aboriginals. The 1990 LMAS will repeat these questions and introduce new questions to identify persons with disabilities. This survey will provide some inter-censal estimates as well as longitudinal data on the labour force experiences of the designated groups. In addition, the data will assist in the 1991 legislative review of the Employment Equity Act.

In November 1988, a questionnaire for surveying the working disabled was tested. The Health and Employment Status Survey (HESS) used a series of screening questions to identify disabled and non-disabled persons. Data were collected on the nature of disabilities and barriers to employment. The data from this survey will be used to update the existing base of information on the disabled population in Canada.

Approximately 50 Statistics Canada-based projects have been undertaken to date to support the Employment Equity Act. The range of activities cover:

- extensive testing of standardized questions for use in future surveys
- data collection
- production of large-scale data packages
- data quality studies directed at employment equity issues
- an extensive research and analysis program.

For further information about these activities and the associated product lines, contact Brenda Cardillo, Manager, Employment Equity Program, Statistics Canada at (613) 951-2559. □

Current Activities at the Canadian Labour Market and Productivity Centre

by
Andrew Sharpe
Head of Research

The Canadian Labour Market and Productivity Centre (CLMPC) is a national institution created to facilitate direct consultation between business and labour on issues of broad social and economic concern. The CLMPC also undertakes activities designed to improve the operation of the Canadian labour market and to enhance joint efforts between business and labour toward improving productivity.

The CLMPC has undertaken an ambitious publications program. The most widely disseminated publication, the *Quarterly Labour Market and Productivity Review*, provides analysis of current developments in the labour market and in the areas of productivity and international competitiveness. The publication also includes a feature article on a selected topic. Past articles have been on the nature of unemployment in Canada, the growth of the service sector, and the importance and adequacy of education and training in Canada. The CLMPC also publishes a newsletter entitled *Working Together*, which provides an overview of activities at the CLMPC, and an *Annual Report*. Copies of the above publications are available to the general public on a complimentary basis.

The Business Branch of the CLMPC produces the quarterly *Business Bulletin*, which provides commentary on current economic developments from a business perspective and summarizes recent research studies of interest to the business community. The Labour Branch has a similar quarterly publication for its labour constituency, entitled *Labour Research Exchange*.

The CLMPC also publishes several series of occasional papers. The Research Branch publishes a technical paper series on labour market and productivity topics. A paper on job vacancies has been published and a paper on labour demand indicators is in preparation. The Labour Branch publishes a labour issue series on topics of interest to the labour constituency. Papers providing a labour viewpoint on privatization, competitiveness and productivity, the growth of the service sector, and the impact of technology are available. The Business Branch produces a series entitled *Business Perspectives on the Economy*. Studies on Europe in 1992 and implications for Canada, and skill shortages have been published.

In 1988 the CLMPC published *A Guide to Current Analysis of the Canadian Economy*, a comprehensive annotated listing of sources of current economic data and analysis on the Canadian economy. Later this year the Labour Branch of the CLMPC will publish *Economic and Labour Market Analysis: A Research Manual for Trade Union Researchers*.

The mandate of the CLMPC is to foster and support business-labour dialogue in Canada. To facilitate this objective the CLMPC organizes bipartite task forces and sectoral committees, which often produce documents available to the general public. The CLMPC Business/Labour Task Force on Labour Adjustment issued a report in January entitled *Working Together to*

Manage Change. In December 1988, an Industrial Adjustment Service committee supported by the CLMPC issued a report on the human resource needs of the space industry in Canada. The Construction Sector committee has recently completed studies of the age structure of construction tradesmen and enrolment trends for apprenticeship programs.

The CLMPC has recently embarked on a major consultative exercise with the private sector for Employment and Immigration Canada. The exercise will have a major influence on the use of monies recently reallocated from the Unemployment Insurance program to training. Throughout the summer of 1989 the CLMPC will be organizing and supporting task forces composed of representatives from the business, labour,

educational and social policy communities. Six topics are to be addressed: programs for unemployment insurance beneficiaries; programs for social assistance recipients; approaches to human resource planning; co-operative education; apprenticeship and entry level training; and programs for older workers. In the fall the task forces will present reports containing specific recommendations for debate at a series of symposia attended by a wide representation of concerned parties. These reports will then be revised and presented to the Government for implementation.

Further information on any of the above publications can be obtained by telephoning (613) 234-0505 or by writing to the CLMPC at 116 Albert Street, 9th Floor, Ottawa, Ontario K1P 5G3. □

Key Labour and Income Facts

The following selection of labour and income indicators is drawn from 11 sources. The first 50 indicators appear in every issue and the remainder address a different topic each time.

The latest available annual data are always shown; as results become available, the indicators are updated so that every issue contains new data. An indicator updated since the last issue is "flagged" with an asterisk.

Data sources

The indicators are derived from the following sources:

1-11 & 15	Labour Force Survey Frequency: Monthly Contact: Ken Bennett (613) 951-4720
12-14	Labour Market Activity Survey Frequency: Annual Contact: Richard Veevers (613) 951-4617
16	Absence from Work Survey Frequency: Annual Contact: Denis Lefebvre (613) 951-4600
17	Workers' Compensation statistics Frequency: Annual Contact: Joanne Proulx (613) 951-4040
18	Help-wanted Index Frequency: Monthly Contact: Jean-Pierre Maynard (613) 951-4045
19-21	Unemployment Insurance statistics Frequency: Monthly Contact: Jean-Pierre Maynard (613) 951-4045

22-29	Survey of Employment, Payrolls and Hours Frequency: Monthly Contact: Howard Krebs (613) 951-4063
30-32	Labour Income (Revenue Canada Taxation-based statistics) Frequency: Quarterly Contact: Ed Bunko (613) 951-4048
33-43	Survey of Consumer Finances Frequency: Annual Contact: Kevin Bishop (613) 951-2211
44-50	Household Facilities and Equipment Survey Frequency: Annual Contact: Penny Barclay (613) 951-4634
51	Survey of Volunteer Activity Frequency: Ad hoc Contact: Scott Murray (613) 951-9476

Notes on the method of deriving certain indicators are given at the end of the table.

Additional data

The table provides at most two years of data for each indicator. A longer time series (generally ten years) for this set of indicators can be obtained on paper or diskette at a cost of \$50. (A more extensive explanation of the indicators is also available.) This ten-year data set will be updated annually in April. Contact: Joanne Bourdeau at (613) 951-0525.

Key Labour and Income Facts

No.	Unit	Year	Canada	Nfld.	P.E.I.	N.S.	N.B.
Labour Market							
1 Labour force	'000	1987	13,011	223	60	399	312
		1988	13,275	231	62	408	318
Change	%		2.0	3.6	3.0	2.2	1.9
2 Participation rate	%	1987	66.2	53.2	62.9	59.9	58.2
		1988	66.7	54.6	64.0	60.8	58.8
3 Employed	'000	1987	11,861	183	52	350	272
		1988	12,245	193	54	366	280
Change	%		3.2	5.5	3.2	4.6	3.2
4 Proportion of employed working part-time	%	1987	15.2	10.8	15.1	16.1	15.0
		1988	15.4	11.2	15.0	15.5	15.4
5 Proportion of part-timers wanting full-time work	%	1987	26.5	60.7	34.8	38.2	40.6
		1988	23.7	58.8	34.5	35.5	36.4
6 Unemployed	'000	1987	1,150	40	8	49	41
		1988	1,031	38	8	42	38
Change	%		-10.4	-5.1	1.3	-15.0	-6.6
7 Official unemployment rate	%	1987	8.8	17.9	13.2	12.3	13.1
		1988	7.8	16.4	13.0	10.2	12.0
Alternative Measures of Unemployment							
8 Unemployed 14 or more weeks as a proportion of labour force	%	1987	3.8	8.2	5.4	5.4	5.6
		1988	3.1	7.7	5.2	4.2	4.8
*9 Unemployment rate:							
- of persons heading families with children under age 16	%	1987	7.9	16.5	13.1	11.5	11.6
		1988	6.9	15.8	13.7	9.6	11.2
- excluding full-time students	%	1987	8.7	17.8	13.5	12.2	13.0
		1988	7.6	16.6	13.4	10.0	11.9
- including full-time members of the Canadian Armed Forces	%	1987	8.8	17.9	13.0	11.9	12.9
		1988	7.7	16.4	12.8	9.9	11.8
- of full-time labour force	%	1987	10.6	20.6	16.2	15.1	15.9
		1988	9.4	19.3	16.0	12.7	14.6
- of part-time labour force	%	1987	11.5	21.2	8.0	14.1	13.9
		1988	9.8	17.1	7.2	12.8	13.2
- including persons on the margins of the labour force	%	1987	9.7	22.1	15.2	13.4	15.5
		1988	8.5	20.2	15.0	11.1	14.0
*10 Underutilization rate based on hours lost through unemployment and underemployment	%	1987	11.1	21.6	16.7	15.7	16.6
		1988	9.9	20.1	16.5	13.4	15.2
*11 Proportion unemployed 6 months or longer	%	1987	23.5	24.5	17.2	22.8	22.5
		1988	20.2	23.9	16.2	21.0	19.9

See notes at end of table.

Key Labour and Income Facts

Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Year	Unit	No.
3,253	4,992	531	489	1,268	1,482	..	..	1987	'000	1
3,311	5,118	535	488	1,290	1,514	..	..	1988	%	
1.8	2.5	0.7	-0.3	1.7	2.2	..	..	
63.3	69.0	66.5	66.4	72.0	65.6	..	..	1987	%	2
64.0	69.6	66.7	66.4	72.4	65.7	..	..	1988		
2,918	4,689	492	453	1,147	1,306	..	..	1987	'000	3
3,001	4,862	494	451	1,187	1,358	..	..	1988	%	
2.8	3.7	0.3	-0.5	3.5	4.0	..	..	
13.5	15.2	16.9	16.9	15.5	17.9	..	..	1987	%	4
13.6	15.6	16.9	17.1	15.5	17.9	..	..	1988		
34.5	17.8	23.4	26.7	25.0	33.7	..	..	1987	%	5
32.6	15.3	21.7	26.5	20.4	28.6	..	..	1988		
335	304	39	36	122	177	..	..	1987	'000	6
311	256	42	37	103	157	..	..	1988	%	
-7.2	-15.7	6.5	1.9	-15.5	-11.3	..	..	
10.3	6.1	7.4	7.4	9.6	11.9	..	..	1987	%	7
9.4	5.0	7.8	7.5	8.0	10.3	..	..	1988		
5.1	2.2	2.7	3.0	3.9	5.4	..	..	1987	%	8
4.4	1.5	2.9	3.1	3.0	4.4	..	..	1988		
9.0	5.5	6.0	6.3	8.2	10.8	..	..	1987	%	9
8.1	4.4	6.2	6.5	7.3	9.4	..	..	1988		
10.2	5.8	7.1	7.1	9.3	11.8	..	..	1987	%	
9.3	4.7	7.5	7.4	7.8	10.3	..	..	1988		
10.3	6.1	7.3	7.3	9.5	11.8	..	..	1987	%	
9.4	5.0	7.7	7.5	7.9	10.3	..	..	1988		
12.5	6.9	9.1	9.4	11.1	14.6	..	..	1987	%	
11.5	5.8	9.2	9.6	9.2	12.8	..	..	1988		
11.2	10.3	9.9	9.6	13.3	14.5	..	..	1987	%	
10.6	8.2	10.9	9.4	11.2	11.2	..	..	1988		
11.9	6.4	7.9	7.8	10.0	12.5	..	..	1987	%	
10.6	5.3	8.3	8.0	8.3	10.8	..	..	1988		
12.8	7.5	9.6	10.1	11.8	15.3	..	..	1987	%	10
11.9	6.3	9.9	10.2	9.8	13.3	..	..	1988		
30.5	16.7	18.1	19.8	20.6	26.6	..	..	1987	%	11
25.7	12.7	16.6	20.8	19.0	22.0	..	..	1988		

See notes at end of table.

Key Labour and Income Facts

No.		Unit	Year	Canada	Nfld.	P.E.I.	N.S.	N.B.
Other Labour Market Indicators								
12	Employed at some time in year, male, age 16 to 69	'000	1986	7,560	151	36	235	191
	– as proportion of male population age 16 to 69	%		87.4	80.7	87.8	82.7	82.0
	Employed at some time in year, female, age 16 to 69	'000	1986	5,987	109	29	187	149
	– as proportion of female population age 16 to 69	%		67.4	58.0	69.0	62.1	61.8
13	Unemployed at some time in year, male, age 16 to 69	'000	1986	1,601	63	11	63	56
	– as proportion of male population age 16 to 69	%		18.5	33.7	26.8	22.2	24.0
	Unemployed at some time in year, female, age 16 to 69	'000	1986	1,441	45	9	58	46
	– as proportion of female population age 16 to 69	%		16.2	23.9	21.4	19.3	19.1
14	Full-time, full-year male paid workers	'000	1986	4,039	53	14	117	90
	Full-time, full-year female paid workers	'000	1986	2,468	35	10	71	53
15	Days lost per worker per year through illness or for personal reasons		1987	8.6	8.9	--	7.4	8.3
			1988	9.2	9.1	--	8.6	8.7
16	Proportion of paid workers absent two or more consecutive weeks because of illness or accident	%	1986	6.3	3.5	4.7	5.1	7.0
			1987	6.3	4.4	5.1	6.1	6.4
17	Workers receiving workers' com- pensation for time-loss injuries	'000	1986	587	9	2	13	10
	<i>Change</i>	%	1987	603	9	2	12	11
				2.7	4.9	6.9	-7.0	10.2
*18	Help-wanted index (1981 = 100)		1987	135	156			
			1988	149	180			
Unemployment Insurance								
*19	Total beneficiaries	'000	1987	1,033	68	13	51	57
	<i>Change</i>	%	1988	1,015	71	13	50	58
				-1.8	5.2	0.7	-2.0	0.9
*20	Total beneficiaries as a proportion of contributors	%	1986	9.0	29.3	23.0	13.7	18.7
			1987	8.2	28.4	22.0	13.0	17.9
*21	Regular beneficiaries without reported earnings	'000	1987	800	55	10	40	46
	<i>Change</i>	%	1988	780	58	10	38	47
				-2.5	5.2	0.1	-2.8	1.6

See notes at end of table.

Key Labour and Income Facts

Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Year	Unit	No.
1,928 84.5	2,850 90.0	306 89.0	289 90.0	733 90.4	843 85.6	.. ..	.. ..	1986	'000 %	12
1,434 60.6	2,331 71.4	256 72.1	229 71.6	601 74.9	661 65.8	.. ..	.. ..	1986	'000 %	
459 20.1	457 14.4	58 13.8	50 13.7	167 17.3	217 19.1	.. ..	.. ..	1986	'000 %	13
377 15.9	482 14.8	49 13.8	44 13.7	139 17.3	192 19.1	.. ..	.. ..	1986	'000 %	
1,013	1,682	154	130	370	416	..	..	1986	'000	14
632	998	109	80	237	242	..	..	1986	'000	
9.8 9.5	8.6 9.7	8.4 9.7	7.1 7.5	7.0 8.3	8.0 7.7	.. ..	.. ..	1987 1988		15
7.4 7.4	5.8 6.1	5.7 6.0	5.2 4.0	6.0 5.9	6.6 6.2	.. ..	.. ..	1986 1987	%	16
213 217 1.6	196 205 4.8	23 23 -4.2	16 16 -1.3	42 41 -2.4	62 66 7.3	.. .. ..	1 1 17.4	1986 1987	'000 %	17
155 172	167 180	69 82			79 96	.. ..	.. ..	1987 1988		18
316 323 2.2	231 216 -6.4	33 35 3.7	29 29 0.2	90 78 -12.9	142 139 -2.3	2 2 -2.9	2 2 -10.8	1987 1988	'000 %	19
11.3 10.2	5.4 4.6	7.0 6.8	7.8 7.8	8.1 7.7	11.0 10.6	11.0 10.5	4.9 5.4	1986 1987	%	20
252 259 2.5	166 151 -9.0	25 26 3.2	22 22 -1.1	70 60 -14.1	111 106 -3.9	1 1 -3.8	1 1 -13.6	1987 1988	'000 %	21

See notes at end of table.

Key Labour and Income Facts

No.	Unit	Year	Canada	Nfld.	P.E.I.	N.S.	N.B.
Earnings (including Overtime) and Hours							
22	Average weekly earnings in current dollars	\$	1987 442.74	423.64	362.07	400.02	407.39
	Change	%	1988 463.80	443.99	379.26	417.92	421.15
			4.8	4.8	4.7	4.5	3.4
23	Average weekly earnings in 1981 dollars	\$	1987 320.36	313.34	275.34	295.22	298.89
	Change	%	1988 322.53	320.57	278.05	298.09	298.26
			0.7	2.3	1.0	1.0	-0.2
24	Average weekly earnings of salaried employees in current dollars	\$	1987 542.06	497.27	460.15	497.27	500.92
	Change	%	1988 568.10	524.26	493.20	516.66	523.26
			4.8	5.4	7.2	3.9	4.5
25	Average weekly earnings of salaried employees in 1981 dollars	\$	1987 392.23	367.80	349.92	366.99	367.51
	Change	%	1988 395.06	378.53	361.58	368.52	370.58
			0.7	2.9	3.3	0.4	0.8
26	Average weekly earnings of hourly paid employees in current dollars	\$	1987 353.34	338.48	240.59	315.52	331.19
	Change	%	1988 370.45	353.66	256.22	330.64	342.13
			4.8	4.5	6.5	4.8	3.3
27	Average weekly earnings of hourly paid employees in 1981 dollars	\$	1987 255.67	250.36	182.96	232.86	242.99
	Change	%	1988 257.61	255.35	187.84	235.83	242.30
			0.8	2.0	2.7	1.3	-0.3
28	Average weekly hours of hourly paid employees	hrs	1987 32.0	35.2	32.2	32.8	33.8
			1988 32.1	35.5	32.6	33.0	34.0
*29	Average weekly overtime hours of hourly paid employees	hrs	1987 1.1	1.4	0.5	0.7	0.8
			1988 1.1	1.7	0.5	0.7	0.9
Labour Income							
*30	Labour income in current dollars	\$ million	1987 296.0	3.9	0.9	7.3	5.7
	Change	%	1988 322.7	4.2	0.9	7.9	6.1
			9.0	8.0	8.4	7.6	7.7
*31	Labour income per employee in current dollars	\$	1987 28,500	24,700	20,200	23,800	23,600
	Change	%	1988 30,100	24,800	21,200	24,500	24,600
			5.5	0.6	4.9	2.9	4.1
*32	Labour income per employee in 1981 dollars	\$	1987 20,600	18,300	15,400	17,600	17,300
	Change	%	1988 20,900	17,900	15,600	17,500	17,400
			1.4	-1.8	1.1	-0.7	0.5
33	Net income from self-employment as a proportion of money income	%	1986 6.0	5.7	8.6	6.2	5.4
			1987 6.7	4.9	12.4	6.6	4.3

See notes at end of table.

Key Labour and Income Facts

Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Year	Unit	No.
430.88	456.35	407.85	406.00	450.28	453.42	513.29	609.53	1987	\$	22
454.01	482.68	422.05	411.30	462.76	466.52	556.24	621.17	1988		
5.4	5.8	3.5	1.3	2.8	2.9	8.4	1.9		%	
308.21	324.11	299.01	300.96	338.30	342.20	..	..	1987	\$	23
313.11	327.46	297.01	291.91	338.27	339.78	..	..	1988		
1.6	1.0	-0.7	-3.0	-0.0	-0.7	..	..		%
515.73	563.40	509.43	523.70	564.86	544.62	599.58	692.29	1987	\$	24
540.82	595.71	536.17	527.58	585.04	564.90	666.78	695.96	1988		
4.9	5.7	5.2	0.7	3.6	3.7	11.2	0.5		%	
368.91	400.14	373.48	388.21	424.39	411.03	..	..	1987	\$	25
372.98	404.15	377.32	374.44	427.66	411.43	..	..	1988		
1.1	1.0	1.0	-3.5	0.8	0.1	..	..		%
352.68	365.11	312.89	295.96	327.68	374.10	405.32	484.96	1987	\$	26
372.12	384.77	321.24	301.31	340.60	390.19	437.86	521.54	1988		
5.5	5.4	2.7	1.8	3.9	4.3	8.0	7.5		%	
252.27	259.31	229.39	219.39	246.19	282.34	..	..	1987	\$	27
256.63	261.04	226.07	213.85	248.98	284.19	..	..	1988		
1.7	0.7	-1.4	-2.5	1.1	0.7	..	..		%
32.9	32.4	31.1	28.8	30.4	30.0	31.8	33.7	1987	hrs	28
32.8	32.5	30.7	28.7	30.8	30.2	32.9	33.3	1988		
0.9	1.2	0.9	0.7	1.2	0.8	2.8	3.6	1987	hrs	29
1.0	1.3	0.8	0.8	1.4	0.9	2.8	4.8	1988		
72.9	126.4	10.8	8.2	27.0	31.8	1.1		1987	\$ million	30
79.5	139.0	11.5	8.6	29.3	34.5	1.2		1988		
9.2	10.0	6.5	4.5	8.2	8.4	9.1				
28,300	30,200	26,100	24,200	27,300	28,100	..	..	1987	\$	31
29,900	32,100	27,500	24,800	28,900	29,100	..	..	1988		
5.8	6.3	5.5	2.8	5.8	3.6	..	..		%
20,200	21,500	19,100	17,900	20,500	21,200	..	..	1987	\$	32
20,600	21,800	19,400	17,600	21,100	21,200	..	..	1988		
2.0	1.5	1.3	-1.6	3.0	-0.0	..	..		%
5.2	5.7	6.9	12.3	5.7	6.6	..	..	1986	%	33
5.8	6.2	7.6	13.4	7.9	7.3	..	..	1987		

See notes at end of table.

Key Labour and Income Facts

No.		Unit	Year	Canada	Nfld.	P.E.I.	N.S.	N.B.
Earnings of Full-time, Full-year Workers								
34	Average earnings of men working full-time, full-year	\$	1986	30,200	25,500	24,100	28,700	27,000
	Change	%	1987	31,900	27,800	25,200	30,300	27,600
				5.6	8.8	4.8	5.8	2.3
35	Average earnings of women working full-time, full-year	\$	1986	19,900	16,800	17,200	18,100	17,400
	Change	%	1987	21,000	17,900	17,900	18,500	18,100
				5.8	6.2	3.9	2.3	4.3
36	Ratio of female to male earnings	%	1986	65.8	66.1	71.7	63.1	64.3
			1987	65.9	64.5	71.1	61.0	65.6
Family Income								
37	Average family income	\$	1986	41,200	30,400	32,000	35,400	33,300
			1987	43,600	33,700	34,800	38,100	35,200
38	Median family income	\$	1986	36,900	26,400	28,100	30,700	30,200
			1987	38,900	29,800	30,900	34,300	31,800
39	Average income of unattached individuals	\$	1986	17,600	12,100	13,200	15,400	15,100
			1987	18,700	14,600	13,800	15,900	13,700
40	Median income of unattached individuals	\$	1986	13,300	9,200	9,500	11,900	11,000
			1987	14,400	10,000	10,600	11,600	10,500
41	Proportion below the low-income cutoff (1978 base):							
	Families	%	1986	11.8	20.4	9.2	14.0	13.5
			1987	11.3	18.9	10.0	11.7	14.4
	Unattached individuals	%	1986	34.6	48.3	42.0	36.5	39.0
			1987	33.5	45.3	32.9	37.7	45.6
	Persons (Population)	%	1986	14.5	22.1	13.2	16.2	15.8
			1987	14.1	20.8	12.9	14.7	16.9
	Children (less than 16 years)	%	1986	17.0	25.7	14.9	19.3	18.8
			1987	16.9	25.9	16.1	16.8	20.5
	Elderly (65 years and over)	%	1986	18.9	21.9	18.4	18.3	17.4
			1987	17.3	20.4	12.3	15.8	18.2
*42	Average family taxes	\$	1986	7,200	4,300	4,400	5,700	4,800
			1987	8,100	5,100	5,000	6,600	5,500
*43	Average family income after tax	\$	1986	34,000	26,100	27,600	29,700	28,500
			1987	35,500	28,600	29,800	31,600	29,700

See notes at end of table.

Key Labour and Income Facts

Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Year	Unit	No.
28,100	32,100	26,200	25,700	31,300	31,700	..	..	1986	\$	34
30,700	33,600	27,900	27,000	32,000	32,900	..	..	1987		
9.2	4.8	6.7	5.1	2.2	3.7	..	..		%
19,500	20,700	18,300	17,600	20,100	20,000	..	..	1986	\$	35
20,500	22,000	19,200	17,900	20,800	21,900	..	..	1987		
5.4	6.1	4.6	1.9	3.8	9.6	..	..		%
69.2	64.6	70.0	68.4	64.1	63.2	..	..	1986	%	36
66.8	65.4	68.6	66.3	65.1	66.7	..	..	1987		
38,100	45,800	37,900	37,000	43,700	40,600	..	..	1986	\$	37
40,100	49,000	39,700	39,100	44,400	42,600	..	..	1987		
34,100	41,100	33,300	32,200	39,300	36,900	..	..	1986	\$	38
35,500	43,800	35,800	35,100	40,000	38,000	..	..	1987		
15,300	18,900	18,000	16,200	18,800	19,100	..	..	1986	\$	39
17,100	20,700	16,900	16,600	19,200	18,900	..	..	1987		
11,200	14,700	14,600	11,900	14,500	14,700	..	..	1986	\$	40
12,600	16,200	12,500	12,900	15,000	15,900	..	..	1987		
										41
14.6	8.5	13.0	15.5	10.1	13.2	..	..	1986	%	
13.9	7.8	11.9	12.4	12.7	13.0	..	..	1987		
44.6	28.8	29.1	33.7	31.5	32.9	..	..	1986	%	
40.7	28.5	35.9	33.4	31.5	31.2	..	..	1987		
17.6	10.6	16.3	19.2	13.1	16.5	..	..	1986	%	
16.8	10.3	15.9	15.9	15.6	15.7	..	..	1987		
18.6	12.9	21.9	24.9	14.8	19.9	..	..	1986	%	
19.0	12.3	21.9	18.9	19.9	18.6	..	..	1987		
26.7	13.8	17.0	17.7	16.1	21.5	..	..	1986	%	
25.2	12.7	15.4	13.9	13.8	19.9	..	..	1987		
6,800	8,400	5,900	6,000	7,300	6,800	..	..	1986	\$	42
7,700	9,300	6,700	6,500	8,400	7,800	..	..	1987		
31,300	37,400	31,900	31,000	36,500	33,800	..	..	1986	\$	43
32,400	39,700	34,500	33,000	32,600	36,000	..	..	1987		

See notes at end of table.

Key Labour and Income Facts

No.		Unit	Year	Canada	Nfld.	P.E.I.	N.S.	N.B.
Households and Dwellings								
44	Average household income	\$	1986 1987	36,400 38,500	28,800 31,700	28,800 31,300	32,000 34,100	30,700 31,900
*45	Proportion of households with:							
	VCRs	%	1987 1988	45.2 52.0	45.4 50.0	34.9 43.2	44.7 51.8	43.2 51.3
	Microwaves	%	1987 1988	43.3 53.8	22.1 34.3	34.9 45.5	35.5 48.5	32.9 48.3
	Two or more automobiles	%	1987 1988	39.4 39.7	15.2 28.9	25.1 43.2	19.2 34.0	19.4 42.4
	Vans and trucks	%	1987 1988	23.3 24.3	30.1 31.3	30.2 31.8	25.7 25.6	31.2 34.9
	Air conditioners	%	1987 1988	19.9 20.8	... ...	-- --	3.0 3.6	3.8 4.6
46	Proportion of owner-occupied dwellings	%	1987 1988	62.8 62.5	81.0 77.1	74.4 75.0	71.7 70.9	75.6 76.5
47	Proportion of all owner-occupied dwellings which are mortgage-free	%	1987 1988	49.9 50.0	70.5 72.7	56.3 54.5	57.3 56.2	56.5 56.0
48	Number of occupied dwellings in need of repair	'000	1987 1988	2,410 2,469	52 56	10 14	105 110	78 75
49	Dwellings in need of repair as a proportion of all occupied dwellings	%	1987 1988	26.5 26.7	31.9 33.7	23.3 31.8	34.5 35.6	33.3 31.5
50	Median rent-to-income ratio	%	1987 1988	20 21	18 18	24 22	22 23	20 22
Survey of Volunteer Activity								
51	Volunteers							
	Both sexes	'000	1987	5,337	110	32	218	162
	Males			2,320	44	12	90	72
	Females			3,018	66	20	128	90
	Participation rate							
	Both sexes	%	1987	27	25	33	32	30
	Males			24	21	24	27	27
	Females			30	30	41	37	32

Key Labour and Income Facts

Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Year	Unit	No.
33,500	40,400	33,600	32,200	38,700	35,000	..	..	1986	\$	44
35,600	43,400	34,300	33,800	38,900	37,000	..	..	1987		
										45
43.8	46.3	47.9	39.9	49.6	43.6	..	..	1987	%	
49.0	54.2	49.7	47.2	58.0	50.7	..	..	1988		
36.7	44.3	53.7	57.0	56.5	44.3	..	..	1987	%	
49.0	54.6	55.3	64.0	64.9	55.0	..	..	1988		
20.6	40.0	46.5	53.9	55.0	44.4	..	..	1987	%	
30.2	40.4	41.3	53.6	54.6	43.6	..	..	1988		
13.8	18.1	31.6	43.3	39.7	33.9	..	..	1987	%	
14.6	20.1	31.1	45.3	40.4	32.4	..	..	1988		
13.5	32.6	38.9	24.4	9.2	7.0	..	..	1987	%	
13.1	35.6	39.5	27.7	7.8	6.9	..	..	1988		
55.3	62.9	68.2	72.2	63.2	64.9	..	..	1987	%	46
55.3	63.2	66.1	70.9	63.9	63.0	..	..	1988		
47.3	48.9	53.7	60.7	45.8	47.4	..	..	1987	%	47
44.1	50.4	55.8	57.5	47.2	49.7	..	..	1988		
561	903	114	120	221	245	..	..	1987	'000	48
565	930	122	100	218	279	..	..	1988		
23.8	27.5	30.0	33.7	26.8	21.8	..	..	1987	%	49
23.4	27.8	32.1	27.9	25.7	24.4	..	..	1988		
19	21	22	24	20	23	..	..	1987	%	50
20	20	23	23	22	23	..	..	1988		
										51
1,005	1,870	303	276	701	661	..	..	1987	'000	
490	780	134	123	308	268	..	..	
515	1,090	170	153	393	393	..	..	
19	26	37	37	40	29	..	..	1987	%	
19	22	34	33	35	24	..	..	
19	29	41	41	44	34	..	..	

Notes

2 Labour force as a proportion of the population aged 15 and over.

7 Unemployed as a proportion of the labour force.

8 This rate, and rates shown as Indicators 9 and 10, is described in *The Labour Force* (71-001), February 1987.

9 The full-time labour force includes persons working full-time, those working part-time involuntarily and unemployed persons seeking full-time work.

The part-time labour force includes persons working part-time voluntarily and unemployed persons seeking part-time work.

On the margins of the labour force includes persons not looking for work because they believe none is available or because they are waiting for recall or for replies from employers.

10 The rate shows hours lost through unemployment (unemployed multiplied by average actual weekly hours) and through underemployment (that is, short-time work schedules and involuntary part-time employment) as a proportion of hours worked plus hours lost.

30 Labour income comprises gross wages and salaries (including directors' fees, bonuses, commissions, gratuities, taxable allowances and retroactive pay) and supplementary labour income (payments made by employers for the benefit of employees, including contributions to health and welfare schemes, pension plans, workers' compensation and unemployment insurance).

31 Labour income per employee is calculated using LFS estimates of paid workers excluding those absent without pay.

41 For an explanation of the methodology underlying the low-income cut-off, see *Income Distributions by Size in Canada* (13-207).

In the Works

Here are some of the topics to be featured in upcoming issues of **Perspectives on Labour and Income**:

■ **Wives as primary breadwinners in the family**

Many working wives are earning more than their spouses. Who are they? Career-oriented women or women whose spouses have suffered recent economic hardship?

■ **Unemployment – a tale of two sources**

A comparison of unemployment data from the Labour Force Survey and the Unemployment Insurance program explaining the differences and looking at recent trends.

■ **Minimum wage workers**

In 1986, one out of twelve paid workers received the minimum wage or less. A look at the characteristics of these workers including their level of education and the kinds of jobs they held.

■ **Immigrant workers**

Immigrant workers are concentrated in certain occupations, among them the 'product fabricating, assembling and repairing' group. This study focuses on garment workers, mechanics and other groups where representation of immigrant workers is high.

■ **The distribution of wealth in Canada and the United States**

Differences between Canada and the United States in the composition of wealth are examined by family characteristics. The study also looks at inequality in the distribution of wealth.

■ **Nursing in Canada**

Registered nurses now form the largest professional occupation in Canada. This study examines the labour market characteristics of this profession and offers insights on why the demand for nurses outweighs the supply.

■ **Moonlighting**

The number of multiple jobholders increased 66% between 1980 and 1988. This paper focuses on key groups of moonlighters and on reasons for multiple jobholding.

■ **Measuring labour underutilization**

Estimating unemployment and underemployment based on hours gives a different view of the Canadian labour market.

PERSPECTIVES ON LABOUR AND INCOME

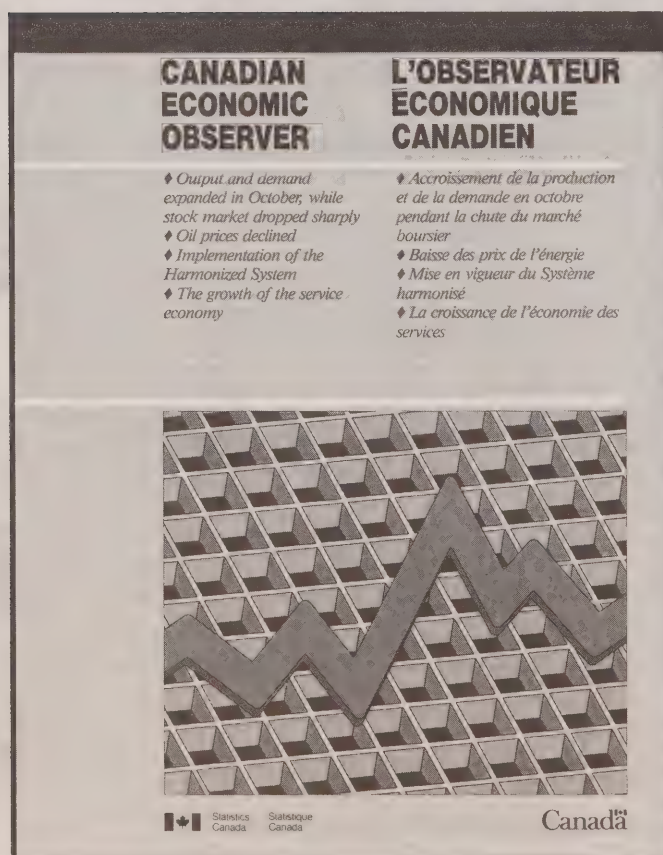
The quarterly for labour market information.

ALL IN ONE PLACE

THE ECONOMIC FACTS AND ANALYSIS YOU NEED

Canadian Economic Observer:
Statistics Canada's New Monthly Economic Report

No other report on the Canadian economy has this much to offer.



This month's data

Up-to-the-minute data includes all major statistical series released two weeks prior to publication.

Current Economic Conditions

Brief, "to the point" summary of the economy's performance over the month, including trend analysis of employment, output, demand and leading indicators.

Statistical and Technical Notes

Information about new or revised statistical programs and methodological developments unique to Statistics Canada.

Major Economic Events

Chronology of international and national events that affect Canada's economy.

Feature Articles

In-depth research on current business and economic issues.

Statistical Summary

Statistical tables, charts and graphs cover national accounts, output, demand, trade, labour and financial markets.

AND MORE

Regional Analysis

Provincial breakdowns of key economic indicators.

International Overview

Digest of economic performance in Canada's most important trading partners — Europe, Japan, and the U.S.A.

Subscribe Today and Save!

Save **\$40 off** the single-issue price of the **Canadian Economic Observer**.

Catalogue #11-010

12 issues \$210.00 / other countries \$252.00

Per copy \$21.00 / other countries \$25.20

(includes postage and handling)

For faster service using Visa or MasterCard call toll-free 1-800-267-6677.

To order, complete the order form included or write to Publications Sales, Statistics Canada, Ottawa, Ontario, K1A 0T6. Please make cheques or money orders payable to the Receiver General for Canada/Publications.

Contact the Statistics Canada Reference Centre nearest you for further information.

ORDER FORM		Client Reference Number		
<p>Mail to: Publication Sales Statistics Canada Ottawa, Ontario, K1A 0T6</p> <p>(Please print)</p> <p>Company _____</p> <p>Department _____</p> <p>Attention _____</p> <p>Address _____</p> <p>City _____ Province _____</p> <p>Postal Code _____ Tel. _____</p>		<p>METHOD OF PAYMENT</p> <p><input type="checkbox"/> Purchase Order Number (please enclose) _____</p> <p><input type="checkbox"/> Payment enclosed \$ _____</p> <p><input type="checkbox"/> Charge to my:</p> <p style="margin-left: 80px;"><input type="checkbox"/> MasterCard <input type="checkbox"/> VISA</p> <p style="margin-left: 80px;">Account Number _____</p> <p style="margin-left: 80px;">Expiry Date _____</p> <p><input type="checkbox"/> Bill me later</p> <p>Signature _____</p>		
Catalogue No.	Title	Quantity	Price	Total
Cheque or money order should be made payable to the Receiver General for Canada/Publications, in Canadian funds or equivalent.			PF 03551 06/89	
For faster service		☎ 1-800-267-6677 ☎		VISA and MasterCard Accounts

[illegible][illegible]



ROCK SOLID INFORMATION

Get a focus on Canada's markets and business opportunities with **the** source of reliable information...Statistics Canada and its unequaled family of outstanding publications and services.

Relying on Statistics Canada means you're building your decisions on hard facts assembled by a professional organization with a world-wide reputation for scrupulous accuracy and complete reliability.

Join the thousands of corporations and individuals who base their Canadian business decisions on Statistics Canada publications. Year after year.

For more information on Statistics Canada's extensive range of publications and information services, please call toll-free 1-800-267-6677.

At Statistics Canada, we provide information you can build on.

PERSPECTIVES

ON LABOUR AND INCOME

**The comprehensive labour and income journal from
Statistics Canada.**

The 1980s have seen wide-reaching changes in the labour market and in the distribution of income and wealth. An aging workforce, rising educational levels and the rapid expansion of the service industries have profoundly affected businesses and families alike.

Perspectives on Labour and Income keeps you informed about these vital trends. Using Statistics Canada's full range of income and employment information, it offers you insightful and timely analysis on important issues each quarter.

Order now and save!

Order your subscription to **Perspectives on Labour and Income** (75-001E) and receive five issues for the price of four! (A one-year subscription costs just \$50.)

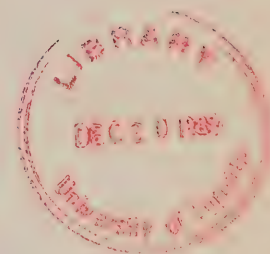
Contact: Publications Sales, Statistics Canada, Ottawa, Ontario, K1A 0T6.
Or, for faster service, call toll free **1-800-267-6677** and use your VISA or MasterCard.

75
-001

PERSPECTIVES

ON LABOUR AND INCOME

Catalogue 75-001E



WINTER 1989

- **MINIMUM
WAGE**
- **MOONLIGHTERS**
- **DISABLED
WORKERS**
- **IMMIGRANTS
IN PRODUCT
FABRICATING**
- **UNEMPLOYMENT -
TALE OF TWO
SOURCES**



Statistics
Canada

Statistique
Canada

Canada

At Your Service...

Statistics Canada's Reference Centres in Canada's Major Cities

St. John's	(772-4073)
Halifax	(426-5331)
Montreal	(283-5725)
Ottawa	(951-8116)
Toronto	(973-6586)
Winnipeg	(983-4020)
Regina	(780-5405)
Edmonton	(495-3027)
Calgary	(292-6717)
Vancouver	(666-3691)

How to Order Publications

This and other Statistics Canada publications may be purchased from local authorized agents and other community bookstores, through the local Statistics Canada offices, or by mail order to Publication Sales, Statistics Canada, Ottawa, K1A 0T6.

1 (613) 951-7277

Facsimile Number 1(613)951-1584

National toll free order line 1-800-267-6677 (Toronto
Credit card only: 973-8018)

Toll-free access is provided in all provinces and territories, for users who reside outside the local dialing area of any of the regional reference centres.

Newfoundland and Labrador	1-800-563-4255
Nova Scotia, New Brunswick and Prince Edward Island	1-800-565-7192
Quebec	1-800-361-2831
Ontario	1-800-263-1136
Manitoba	1-800-542-3404
Saskatchewan	1-800-667-7164
Alberta	1-800-282-3907
Southern Alberta	1-800-472-9708
British Columbia (South and Central)	1-800-663-1551
Yukon and Northern B.C. (area served by NorthwesTel Inc.)	Zenith 0-8913
Northwest Territories (area served by NorthwesTel Inc.)	Call collect 403-495-2011

PERSPECTIVES

ON LABOUR AND INCOME

Winter 1989

Vol. 1, No. 3

Articles

8 Working for minimum wage

Ernest B. Akyeampong

One in twelve paid workers in 1986 earned the minimum wage or less. A portrait of low-wage earners and a brief look at the origins of minimum wage legislation and differences by jurisdiction.

21 Moonlighters

Maryanne Webber

In the average week of 1988, over a half a million people worked at two or more jobs. This study shows that some groups of workers – the young, the self-employed – are especially disposed to moonlighting. Family circumstances, hours of work and earnings between single and multiple jobholders are examined.

31 Disabled workers

Gary L. Cohen

There were nearly 400,000 disabled workers in Canada in 1986 – less than a third of working-age Canadians with a disability. What are the characteristics of disabled workers? This study compares disabled workers with the non-disabled in the work force and with disabled persons outside of the work force.

39 Immigrants in product fabricating

Jane Badets and Nancy McLaughlin

Immigrant workers are over-represented in "product fabricating" occupations, which include, for example, garment workers and mechanics. This profile of immigrants in fabricating jobs looks at age, education, period of immigration and knowledge of English or French. It also compares the employment income of immigrant and non-immigrant workers in product fabricating occupations.

Departments

3 Forum

6 Highlights

58 Sources

67 Key labour and income facts

79 In the works

On the Cover:

Computer Artwork
The Stock Market Inc.

Perspectives on Labour and Income

(Catalogue 75-001E; aussi disponible en français, n° 75-001F au répertoire) is published four times a year under the authority of the Minister of Regional Industrial Expansion.

© Minister of Supply and Services
Canada 1989. ISSN: 0840-8750
(75-001E), 0843-4565 (75-001F)

SUBSCRIPTION RATES: \$50 a year in
Canada, \$60 elsewhere. Single issue
\$12.50 in Canada, \$15 elsewhere.

49 Unemployment: a tale of two sources

Jean-Marc Lévesque

Unemployment estimates from the Labour Force Survey, source of the official unemployment rate, are quite different from counts of the number of Unemployment Insurance beneficiaries. This piece reviews the conceptual differences between the two data sources and quantifies many of the factors that create the discrepancies.

Symbols

The following standard symbols are used in Statistics Canada publications:

- .. figures not available
- ... figures not appropriate or not applicable
- nil or zero
- amount too small to be expressed
- P preliminary figures
- r revised figures
- X confidential to meet secrecy requirements of the Statistics Act

PERSPECTIVES

ON LABOUR AND INCOME

Editor-in-Chief

Ian Macredie
(613) 951-9456

Managing Editor

Maryanne Webber
(613) 951-6894

Editors

Henry Pold
Doreen Duchesne
Heather Clemenson
Christine Campbell

Data and Graphics

Co-ordinator

Jamie Darch

Production Co-ordinator

Lyne Naguib

Marketing Co-ordinator

Bruce Simpson

Design and Composition

Publications Division

Extracts from this publication may be reproduced for individual use without permission provided the source is fully acknowledged. However, reproduction of this publication in whole or in part for purposes of resale or redistribution requires written permission from the Programs and Publishing Products Group. Acting Permissions Officer, Crown Copyright Administration, Canadian Government Publishing Centre, Ottawa, Canada K1A 0S9.

Forum

From the Editor

■ In her letter in the Forum section of this issue, Professor Lorna Marsden lists some of the groups whom she expects will be readers of *Perspectives*. These insights are to my mind valuable in shaping this publication. I am grateful to her for identifying some of our potential readership and would like to offer a few thoughts on a closely related matter, that is, the objectives we are pursuing through the analysis in *Perspectives*.

Our first and most important goal is to make volumes of often complex data more accessible to a busy audience. In other words, analysis in *Perspectives* serves to synthesize and distill information we believe will be of value to readers. The articles, if they do their job, should give our readers access to information contained in vast quantities of data without the necessity of actually poring over those data.

Analysis also serves to inform our readers of the availability of data, for example, new surveys or innovative uses of well-known surveys. Analysis reveals some of the properties of the data sets used – are they available for small geographic areas? are they demographically disaggregated? This is of particular value if *Perspectives*' readers want to do further analysis in the same or a related area.

Finally, analysis provides us with an opportunity to demonstrate the strengths

and the limitations of our data and in so doing enable our readers to use both *Perspectives*' analytic findings and Statistics Canada data with greater confidence.

Hopefully, the third issue continues to provide our readers with analytic insights as well as expanding their knowledge of data sources. For example:

- the article on minimum wage earners uses Labour Market Activity Survey data and will interest those assessing changes in policy in this area
- the article on disabled workers draws attention to the potential of the Health and Activity Limitations Survey
- the piece on moonlighting shows what can be accomplished by analytically combining data from different sources
- the study on the topical issue of unemployment insurance focuses on a comparison of two data sources, the Labour Force Survey and Unemployment Insurance data.

This is your publication. Please let us know how it can be improved.

Ian Macredie
Editor-in-Chief



Letters

■ In introducing the first issue, Summer 1989, neither the Editor-in-Chief nor the Chief Statistician describe the audience for this journal. In fact this new publication will be welcomed by a range of data users. I have read it as someone who uses data constantly in research, in writing and for public policy purposes, who teaches the sociology of work to undergraduates, and who guides graduate students interested in economic sociology. *Perspectives* will be useful in all this work.

For example, the Gower article on unemployment in Canada provides excellent background for those contemplating the changes in unemployment insurance which will be considered in Parliament in the fall term. The map on page 21 is particularly dramatic and telling. It is already circulating widely among those looking at the proposed legislation in detail. Equally useful in connection with the same legislation is the Moloney article on maternity leave, with its rather startling data on changes in women's patterns of maternity leave and compensation.

Almost all the articles are helpful for students but, in particular, I was very happy to see the Cohen article on youth in the labour market. Attention shifted from young workers almost as soon as the baby boom grew up, yet every provincial official interested in training issues is worried about this segment of the labour force. The data are especially helpful in illustrating the problems to students in entering the workplace and researchers looking for the less obvious demographic forces. The same can be said for the Akyeampong piece on temporary help and the Lévesque article on bilingual workers and earnings. These raise issues for public policy and for sociological study.

What more can one ask? The articles are written in a very spare and simple fashion. This makes them eminently understandable to even the most uninformed reader.

However, as someone who insists that students provide accurate titles and sources on all tables and charts, so that they can be understood by someone who does not read the text, the labelling here is rather discouraging. The footnotes and references do cover these questions of course, but not in the detail that sends the students directly to the sources. Graduate students may buy a data set for their work, but an undergraduate, being trained to be an intelligent consumer and user of Statistics Canada, will not and needs better direction. It is quite possible, however, that this journal is not written for the undergraduate student, although I am confident that it will be widely used for teaching purposes. The copyright provisions on page 2 are most welcome in this era without single copy exemption in the current law.

It is heartening to see the innovative publications which Statistics Canada has produced – *Canadian Social Trends* and *Perspectives on Labour and Income* are excellent products for Canadian readers.

Hon. Lorna R. Marsden, Ph.D.
Professor of Sociology
University of Toronto



■ The work Statistics Canada has done in illuminating the different aspects of the labour markets in Canada is well-known: on-going surveys like the Labour Force Survey, the Labour Market Activity Survey as well as previous surveys like the Survey of Work History, the Displaced Workers Survey have become standard reference for academics, policy analysts and for the informed public.

Perspectives on Labour and Income is a welcome addition to this already extensive list. The tone of the publication is geared towards a wider audience. This is highly desirable as it makes the research accessible to the general public and builds awareness

among the general populace about the changing nature of the current labour market. We urge that this publication be as widely disseminated as possible.

The journal is also very interesting for the professional researcher. It promises to outline new and innovative ways of utilizing the labour market information provided by Statistics Canada and this will be done by individuals who are closest to the data – the professional staff at Statistics Canada.

We at the Council are, and have been in the past, closely monitoring the Canadian labour market and its links with the rest of the economy. Labour market adjustments in response to events such as free trade and technological innovation have formed major research areas at the Council. We are pleased to note that current and future articles of *Perspectives* are going to address many issues we have found to be important in discussing the performance of the Canadian labour market. This welcome news will aid and assist us in our own research efforts.

Dr. Surendra Gera, Project Leader
 Dr. Syed Sajjadur Rahman,
 Senior Economist
 Unemployment Issues Group
 Economic Council of Canada



We welcome your views on articles and other items that have appeared in *Perspectives on Labour and Income*. Additional insights on the data are also welcome, but to be considered for publication, communications should be factual and analytical. We encourage readers to inform us about their current research projects, new publications, data sources and upcoming events relating to labour and income.

Statistics Canada reserves the right to select and edit items for publication. Correspondence, in either official language, should be addressed to: Forum and Sources Editor, *Perspectives on Labour and Income*, 5-A Jean Talon Building, Statistics Canada, Ottawa, K1A 0T6, or call (613) 951-4626.

Highlights

Here are some key findings from the articles in this issue of Perspectives on Labour and Income.

Working for minimum wage

- About one million Canadians worked for \$4.00 or less at some time in 1986.
- Teenagers accounted for about 40% of these low-wage earners. The 377,000 adult workers (aged 25 to 69) who earned minimum wage or less accounted for 36%.
- About half of these jobs were part-time, occupied principally by teenage students.
- Two-thirds of these jobs were in small establishments; close to a third were in the hospitality industry; and over a third lasted less than three months.
- Only a handful (6%) of the low-wage earners were unionized or had an employer-sponsored pension plan.
- Compared to the average worker, persons earning the minimum wage or less were more likely to collect social assistance. They accounted for 9% of all paid workers in 1986, but 22% of all employees who collected welfare sometime during that year.

Moonlighters

- Since 1980, the number of workers with two or more jobs has risen 65%, surpassing the half million mark in 1988.
- Almost half of these multiple jobholders are self-employed in one of their jobs. Typically, they combine running a business with working at a wage or salary job.
- In 1988, the proportion of multiple jobholders was highest among teenagers (5.4%) and declined with age.
- The average earnings of multiple jobholders are higher than those of single jobholders, but the difference is minimal.

Disabled workers

- One out of 30 workers in Canada in June 1986 had a disability affecting the kind or amount of work that he or she could do.
- Only 30% of all disabled people of working age were employed, compared with 70% of the non-disabled. Disabled men were more likely to be employed than disabled women: 38% versus 22%.
- Disabled workers tended to have less education than the non-disabled and they were more likely to be employed in low-skill

occupations. However, the likelihood of a disabled person having a job rose very markedly with increased levels of education.

■ On average, disabled workers, especially men, had lower employment income in 1985 than their non-disabled counterparts, even after accounting for differences by age and education.

Immigrants in product fabricating

■ More than four of every ten women in fabricating jobs in 1986 were immigrants. Immigrant women tend to be concentrated in low-paying textile jobs.

■ Historically, immigrant workers were predominantly European-born but this pattern is changing. In the product fabricating group, almost half of all recent immigrants – those arriving between 1981 and 1986 – were Asian-born.

■ For both male and female immigrants in fabricating, average earnings were higher the longer they had been in Canada – regardless of age.

Unemployment: a tale of two sources

■ In 1988, the Labour Force Survey yielded an average unemployment estimate of 1.0 million; in contrast, the number of Unemployment Insurance beneficiaries – those out of work and receiving regular benefits – was 0.8 million.

■ Students, new labour force entrants and people formerly self-employed are among those who may be unemployed and actively seeking work but who are not eligible for UI benefits. Removing these ineligible groups from the unemployment total reduces the gap. In Ontario, for example, after these exclusions, the number of unemployed was 153,000, quite close to the actual number of UI beneficiaries (151,000).

■ However, variations in economic conditions alter the picture from one province to the next. For example, in Newfoundland, the number of unemployed averaged 38,000 in 1988, well below the number of UI beneficiaries (58,000). □

Working for minimum wage

Ernest B. Akyeampong

Canadian attempts at regulating wages started with the federal "Fair Wages Policy" of 1900. It was aimed at protecting workers engaged on all public works and government contracts. However, Canada was not a world leader in this area, the first minimum wage legislations having been enacted in New Zealand, Australia and Great Britain during the 1890s. By 1920, six Canadian provinces had passed laws to protect working women and children from exploitation. By the mid-1950s, minimum wage laws affecting male workers had become widespread.

The objectives of minimum wage legislation in Canada, as in many other industrial countries, have changed over time. These laws have been variously aimed at eliminating labour "sweating", assuring a "living wage" and protecting women and young workers. They have also been looked upon as a built-in device for economic stabilization, a tool for narrowing or maintaining the wage gap between organized and unorganized workers, and a weapon against poverty. Many of these goals overlap; the one that gets the most attention at a particular point in time is determined by the prevailing socio-political and economic climate.

Ernest B. Akyeampong is with the Labour and Household Surveys Branch. He can be reached at (613) 951-4624.

This study examines the socio-demographic characteristics of minimum and sub-minimum wage earners – also referred to in this study as low-wage earners – and the types of jobs they hold. This information might provide useful insights about which workers and employers are likely to be affected by an increase in the minimum wage.

Data source, definitions and coverage

The worker and job profiles in this study are derived from the 1986 Labour Market Activity Survey (LMAS). This household survey provides information on the socio-demographic characteristics of Canadian workers and describes their jobs (up to five per person) and wage rates of the jobs they held over the calendar year. Thus, it identifies workers employed at, above, or below the minimum wage. The LMAS wage rates are straight time-compensation for labour services: they exclude tips, bonuses and commissions.

For this study, the minimum wage rate is the one stipulated for experienced adult workers, sometimes referred to as the general minimum wage rate. This rate varies from province to province. Also, within each province, the rate for workers under federal jurisdiction can differ from those under provincial jurisdiction. For all or most of 1986, the federal general minimum wage, as well as that of the six provinces from Newfoundland to Ontario, was \$4.00 an hour. Of the four western provinces, two had slightly higher rates, with Manitoba at \$4.30 and Saskatchewan at \$4.50. The other two had slightly lower rates, with Alberta at \$3.80 and British Columbia at \$3.65 (see Table 11).

Because the \$4.00 an hour general minimum wage prevailed across most of Canada in 1986, and since the differences in the western provinces somewhat offset each other, this rate was selected as the minimum wage cut-off for this study.

Worker profile

During 1986, an estimated 12 million people were employed as paid workers across Canada. Approximately one million, or one in twelve workers, earned \$4.00 or less an hour sometime during that year. Who were these low-wage earners?

Age

Persons working at or below the minimum wage tend to be young. In 1986, about 40% of all paid workers who earned \$4.00 or less an hour were between the ages of 16 and 19. Another 24% were aged 20 to 24. The comparable shares of these two groups in the paid work force in 1986 were much lower, 9% and 16% respectively. Adults (25-69 years) were a minority among low-wage earners, accounting for only 36%. Even so, the number of adults who reported earning the minimum wage or less at some time in 1986 was considerable (377,000).

Similarly, the incidence of low wages declined by age. About 37% of paid teenage workers earned \$4.00 or less sometime in 1986; among those aged 20-24, the proportion was 13%, and for adult workers, 4% (Table 1).

The high proportion of low-wage earners among teenagers is not surprising: in 1986, six provinces – Prince Edward Island, Nova Scotia, Ontario, Manitoba, Alberta and British Columbia – permitted employers to pay wages lower than the general minimum to young workers and students (Table 11). Approximately one in five teenagers was paid less than the general minimum wage at some time in 1986. The majority of teenagers (85%) earning \$4.00 or less an hour were also full-time students in high school, college or university for eight or more months in 1986.

Table 1

Paid workers by hourly wage rate: selected characteristics, Canada, 1986

	Paid workers		Low-wage incidence rate*
	Total	At \$4.00 or less	
	'000		%
Age and sex			
Both sexes			
All ages (16-69)	12,045	1,035	9
16-24	3,009	658	22
16-19	1,111	414	37
20-24	1,898	244	13
25-69	9,035	377	4
25-54	7,925	327	4
55-69	1,111	50	4
Men			
All ages (16-69)	6,566	409	6
16-24	1,570	278	18
16-19	590	186	32
20-24	980	92	9
25-69	4,996	132	3
25-54	4,304	113	3
55-69	692	19	3
Women			
All ages (16-69)	5,479	626	11
16-24	1,439	381	26
16-19	521	228	44
20-24	919	153	17
25-69	4,040	245	6
25-54	3,621	214	6
55-69	419	31	7
Family status and sex			
Men			
Spouse present	4,080	91	2
Lone parent	139	--	--
Others	2,347	314	13
Women			
Spouse present	3,248	221	7
Lone parent	414	37	9
Others	1,817	367	20

Source: 1986 Labour Market Activity Survey

* Percentage of all paid workers at \$4.00 or less.

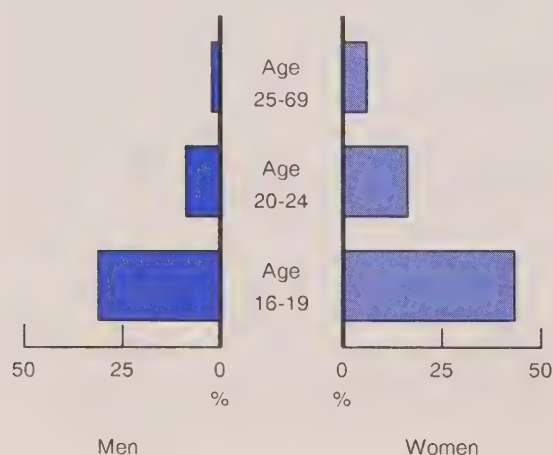
Sex

Women are also over-represented among low-wage earners. In 1986, they accounted for 45% of all paid employees, but comprised 60% of those earning the minimum wage or less. Women were almost twice as likely as men to be working for \$4.00 or less an hour, the incidence rates being 11% for women and 6% for men. Close to a quarter of a million adult women worked for the minimum wage or less sometime in 1986.

Married women and single-parent mothers are more likely to work at or below the minimum wage than men of the same status. About 7% of married working women received this rate in 1986 compared with 2% of married men. Approximately 9% of single-parent mothers were paid at \$4.00 or less per hour, compared with only a handful of their male counterparts.

Incidence of minimum wage earners by age and sex, 1986

Among both men and women, the proportion of low wage earners was highest among teenagers.



Source: 1986 Labour Market Activity Survey.

Education

The incidence of low wages is generally higher among less educated workers (Table 2). This is true for both adult and young workers. In 1986, the incidence ranged from a high of 11% for workers with no or some postsecondary education to a low of 3% for those with a university degree.

About 71% of the low-paid working population in 1986 consisted of persons whose education ended at the high school level or below; persons with similar education accounted for only 60% of the total paid employees that year. Some of the highly educated low-wage workers may be casual workers, students, older workers or retirees.

Table 2
Paid workers by hourly wage rate and educational attainment, Canada, 1986

Educational level	Paid workers		Low-wage incidence rate*
	Total	At \$4.00 or less	
	'000		%
16-69 years, all levels	12,045	1,035	9
0-8 years	1,113	88	8
Some secondary	6,054	644	11
Some postsecondary	1,416	155	11
Postsecondary diploma	1,804	90	5
University degree	1,658	58	3
25-69 years, all levels	9,035	377	4
0-8 years	1,031	66	6
Some secondary	4,270	195	5
Some postsecondary	809	31	4
Postsecondary diploma	1,406	42	3
University degree	1,519	43	3

Source: 1986 Labour Market Activity Survey

* Percentage of all workers paid at \$4.00 or less.

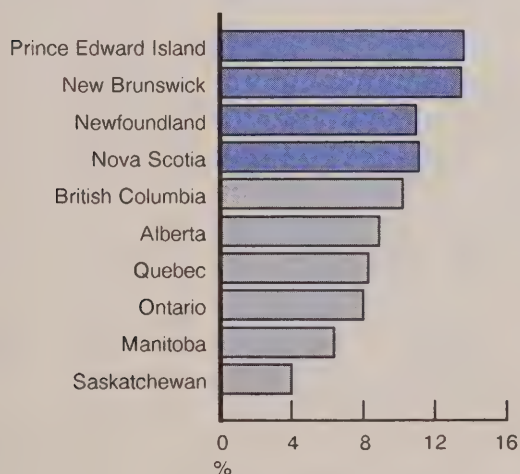
Geographical differences

The proportion of paid workers earning the minimum wage or less varies among Canada's provinces and major metropolitan areas. This variation is tied to several factors, including differences in industry mix and the degree of labour market tightness.

In Ontario and Quebec, about 8% of all paid workers received \$4.00 or less an hour at some time in 1986 (Table 3). The Atlantic provinces recorded larger proportions of low-paid workers: about 11% in both Newfoundland and Nova Scotia, and 14% in Prince Edward Island and New Brunswick. The incidence rates in Manitoba (7%) and Saskatchewan (4%) were lower than the national rate, but one should remember that the provincial minimum wage in these two provinces was higher than the \$4.00 cut-off. Similarly, the proportions were a bit higher in Alberta (9%) and British Columbia (10%), where the actual provincial minimum wage was below the \$4.00 cut-off.

Incidence of minimum wage workers by province, 1986

The proportion of low wage workers is highest in Atlantic Canada.



Source: 1986 Labour Market Activity Survey.

Table 3
Paid workers by hourly wage rate,
Canada and provinces, 1986

	Paid workers		Low-wage incidence rate*
	Total	At \$4.00 or less	
	'000		%
All ages (16-69)			
Canada	12,045	1,035	9
Newfoundland	239	27	11
Prince Edward Island	56	8	14
Nova Scotia	378	43	11
New Brunswick	308	42	14
Quebec	3,007	251	8
Ontario	4,681	379	8
Manitoba	482	31	7
Saskatchewan	407	17	4
Alberta	1,180	104	9
British Columbia	1,307	134	10
Ages 25-69			
Canada	9,035	377	4
Newfoundland	175	12	7
Prince Edward Island	40	--	--
Nova Scotia	280	17	6
New Brunswick	229	16	7
Quebec	2,277	103	5
Ontario	3,500	123	4
Manitoba	356	10	3
Saskatchewan	294	10	3
Alberta	875	42	5
British Columbia	1,010	42	4

Source: 1986 Labour Market Activity Survey

* Percentage of all workers paid at \$4.00 or less.

For adult workers, the pattern of inter-provincial variation was much the same. The proportion at or below the \$4.00 cut-off ranged from a low of 3% in Manitoba and Saskatchewan, to a high of 7% in Newfoundland and New Brunswick.

The variations in low-wage incidence rates for adult paid workers in four census metropolitan areas – Montreal, Toronto, Oshawa and St. Catharines-Niagara – reflect, among other factors, differences in industry mix and labour market tightness (Table 4).¹

Table 4
Paid workers by hourly wage rate in
selected census metropolitan areas, 1986

	Paid workers		Low-wage incidence rate*
	Total	At \$4.00 or less	
	'000		%
All ages (16-69)			
All metropolitan areas	7,592	575	8
Montreal	1,485	111	7
Toronto	1,796	88	5
Oshawa	93	6	6
St. Catharines- Niagara	133	16	12
Non metropolitan areas	4,453	460	10
Ages 25-69			
All metropolitan areas	5,672	199	4
Montreal	1,108	49	4
Toronto	1,330	25	2
Oshawa	70	--	--
St. Catharines- Niagara	102	7	7
Non metropolitan areas	3,363	178	5

Source: 1986 Labour Market Activity Survey

* Percentage of all workers paid at \$4.00 or less.

About 4% of Montreal's adult paid work force earned the minimum wage or less sometime in 1986, double the rate for the Toronto adult work force. Tighter labour market conditions in Toronto (with a 1986 annual average unemployment rate of 5.5% compared with 10.6% in Montreal) likely contributed to Toronto's low rate. In the auto manufacturing centre of Oshawa, only a handful of the adult paid workers were paid at the minimum or sub-minimum wage. In contrast, in St. Catharines-Niagara, where many workers are employed in the accommodation, food and beverage industry, about 7% of the adult paid employees worked for an hourly wage of \$4.00 or less.

Job profile

Although Canada's low-wage earners numbered one million in 1986, they actually occupied 1.2 million low-paying positions or jobs (Table 5). This is because some of these workers held two low-wage jobs at the same time (multiple jobholders) or at different times during the year (job changers).² What kinds of jobs carried the minimum wage of \$4.00 or less?

Table 5
Paid jobs by hourly wage rate, Canada and provinces, 1986

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta	B.C.
Hourly wage rate (\$)	'000										
0.01 - 1.99	124	4	--	3	3	28	44	6	5	15	15
2.00 - 3.99	599	10	3	13	18	150	236	21	12	63	73
4.00	457	15	5	32	27	102	161	8	--	42	64
4.01 - 4.99	1,151	25	8	43	32	244	493	67	66	95	78
5.00 - 5.99	1,544	43	13	57	40	346	613	73	63	155	143
6.00 - 6.99	1,199	26	7	49	36	263	482	60	47	117	112
7.00 - 9.99	3,206	73	17	101	88	808	1,210	136	118	330	325
10.00 - 14.99	3,888	52	10	95	81	972	1,555	147	122	393	460
15.00 and over	2,632	28	5	52	43	614	1,104	80	68	289	349
Total	14,800	275	68	446	369	3,527	5,898	598	501	1,500	1,618

Source: 1986 Labour Market Activity Survey

Full-time/part-time

Part-time employment (less than 30 hours a week) features very prominently in low-paying jobs. Approximately 46% of jobs paying the minimum wage or less in 1986 were part-time, compared with 22% for all paid positions (Table 6). Young workers occupied about three-quarters of the low-paying part-time jobs. Approximately one-quarter of the low-paid part-time jobs entailed only a few (up to ten) hours of work a week: not surprisingly, most of these jobs were occupied by students.

Slightly more than a quarter of a million (274,000) of the low-paid jobs occupied by adults in 1986 were full-time. Why would so many adult workers accept full-time employment in low hourly rated jobs? Part of the answer lies in the fact that many of these positions were in the service industries, where tips, bonuses and commissions often feature prominently in total labour income. Also, for many of the less educated adults, these may have been the only jobs for which they were qualified. Other jobs may simply not be covered by minimum wage legislation (see Table 11).

Industry and occupation

Most jobs paying the minimum wage or less are in the service sector. The highest incidence of low pay in 1986 was in accommodation, food and beverage services, where about one in three paid jobs carried the minimum wage or less (Table 7). Several factors account for this high incidence. A major one is the ample supply of youth labour. Close to half of the low-paying jobs in this industry were occupied by teenagers (mostly part-time students). Second, workers in this particular industry often benefit from non-wage incomes, such as tips. The lowest incidence of low-paying jobs was in finance and insurance, and in communications and other utilities (both 2%).

Table 6

Paid jobs by hourly wage rate and full-time/part-time status, Canada, 1986

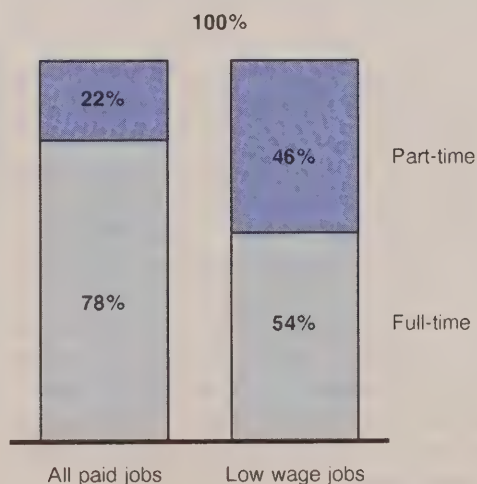
	Paid jobs		Low-wage incidence rate*
	Total	At \$4.00 or less	
	'000		%
Full-time/part-time status			
All ages (16-69)			
All jobs	14,800	1,180	8
Full-time jobs	11,605	642	6
Part-time jobs	3,195	538	17
Ages 16-24			
All jobs	4,312	777	18
Full-time jobs	2,811	368	13
Part-time jobs	1,501	410	27
Ages 25-69			
All jobs	10,489	403	4
Full-time jobs	8,794	274	3
Part-time jobs	1,695	128	8

Source: 1986 Labour Market Activity Survey

* Percentage of all paid jobs at \$4.00 or less.

Full-time/part-time employment distribution, 1986

Nearly half of all low wage jobs compared with a fifth of all jobs were part-time.



Source: 1986 Labour Market Activity Survey.

Table 7
Paid jobs by hourly wage rate and industry, Canada, 1986

	Paid jobs		Low-wage incidence rate*
	Total	At \$4.00 or less	
	'000		%
All industries	14,800	1,180	8
Agriculture	283	63	22
Other primary	401	14	4
Manufacturing	2,569	65	3
Construction	865	23	3
Transportation and storage	602	19	3
Communication and other utilities	451	9	2
Wholesale trade	613	22	4
Retail trade	1,988	223	11
Finance and insurance	532	9	2
Real estate and insurance agents	223	20	9
Business services	662	33	5
Education services	1,043	45	4
Health and social services	1,249	55	4
Accommodation, food and beverage services	1,203	370	31
Other services	944	160	17
Government services	1,172	51	4

Source: 1986 Labour Market Activity Survey

* Percentage of all paid jobs at \$4.00 or less.

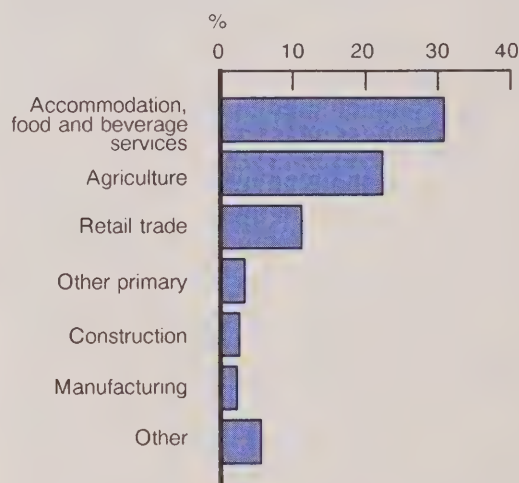
A higher than average proportion of workers in retail trade was employed at the minimum or sub-minimum wage, but many workers in this industry receive commissions and bonuses to supplement their hourly wages. A high incidence of low-wage jobs existed in agriculture (22%) in 1986, but many agricultural jobs are excluded from the minimum wage laws in several provinces (Table 11). Also, many agricultural workers receive other, non-monetary, remuneration – for example, free or reduced room and board.

The prevalence of low-wage jobs by occupation generally mirrors that by

industry. In 1986, over half of all low-paying jobs were in sales and services (Table 8).

Incidence of minimum wage jobs by industry, 1986

The proportion of low wage jobs was highest in accommodation, food and beverage services.



Source: 1986 Labour Market Activity Survey.

Establishment size and job tenure

In 1986, small establishments – those employing fewer than 20 people – accounted for two-thirds of jobs paying the minimum wage or less (Table 9). In these establishments, approximately two out of three low-paying jobs were occupied by young people. At the other extreme, only 2% of jobs paying \$4.00 or less an hour were in large establishments, those employing 500 or more.

For several reasons, many low-paying jobs are held for a brief period. First, the wage rate is not particularly attractive. Second, many of these jobs are occupied by students, with potentially weak and intermittent work force attachment. In 1986, only one in five of the low-wage jobs, compared with about one in two of all paid jobs,

was occupied year-round. Looked at another way, about 38% of the low-wage jobs, compared with 19% of all paid jobs, had a tenure rate of three months or less.

Table 8
Paid jobs by hourly wage rate and occupation, Canada, 1986

	Paid jobs		Low-wage incidence rate*
	Total	At \$4.00 or less	
	'000		%
All occupations	14,800	1,180	8
Managerial or professional	3,937	144	4
Clerical and related	2,702	160	6
Sales	1,292	150	12
Service	2,231	494	22
Food and beverage preparation	949	299	32
Lodging and other accommodation	110	17	15
Personal services	292	76	26
Primary occupations	559	86	15
Processing, machining and fabricating	2,029	63	3
Machining and related	343	6	2
Construction trades	870	17	2
Transport equipment operating	556	28	5
Material handling and other crafts	583	35	6
Occupations not elsewhere classified	40	4	9

Source: 1986 Labour Market Activity Survey

* Percentage of all paid jobs at \$4.00 or less.

Unionization and pension coverage

One goal of minimum wage legislation is to protect unorganized workers from exploitation. This being so, one would expect most persons working at the minimum or sub-minimum wage to be non-unionized. Data from the LMAS confirm this (Table 10). In 1986, only 6% of low-paid positions were occupied either by members of a union or

some other bargaining agent, or by non-union members who had their wages covered by collective agreement. This compared with a rate of 34% for all paid positions.

Table 9
Paid jobs by hourly wage rate, establishment size and job tenure, Canada, 1986

	Paid jobs		Low-wage incidence rate*
	Total	At \$4.00 or less	
	'000		%
Establishment size			
Total	14,800	1,180	8
19 persons or fewer	6,126	781	13
20-99 persons	4,554	306	7
100-499 persons	2,692	69	3
500 or more persons	1,428	24	2
Job tenure in 1986†			
Total	14,800	1,180	8
Under 4 weeks	493	79	16
4-13 weeks	2,340	372	16
14-26 weeks	2,298	269	12
27-51 weeks	2,620	221	8
52-53 weeks	7,049	239	3

Source: 1986 Labour Market Activity Survey

* Percentage of all paid jobs at \$4.00 or less.

† Number of weeks worked in job in 1986.

In addition to having a low unionization rate, workers occupying minimum or sub-minimum wage jobs seldom enjoy the privileges of an employer-sponsored pension plan – only 6% had coverage in 1986. This compared with a coverage rate of 36% for all paid positions.

The low rates of unionization and pension coverage among persons working at the minimum or sub-minimum wage is not surprising since many of these jobs are in small establishments. In addition, the large number of students in these jobs tends to inhibit unionization and reduces the attraction to participate in pension plans. Pension coverage among adult low-paid workers was higher, at 14%, and may be related to longer job tenure.

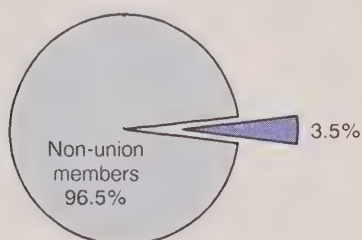
Table 10
Unionization and pension plan coverage rates, paid jobs, 1986

	Unionized		Non-unionized but covered by a collective agreement		Covered by an employer-sponsored pension plan	
	All paid jobs	Min./sub-min. wage jobs	All paid jobs	Min./sub-min. wage jobs	All paid jobs	Min./sub-min. wage jobs
	%					
All ages (16-69)	29	4	5	2	36	6
16-24	13	2	4	2	12	2
25-69	36	7	5	3	46	14

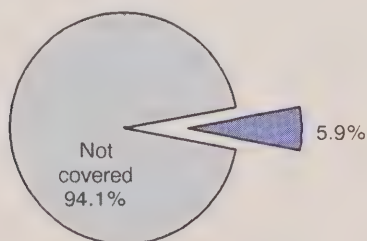
Source: 1986 Labour Market Activity Survey

Union and pension plan coverage for minimum wage jobs, 1986

Very few workers in low wage positions belonged to a union...



...and most were not covered by an employer-sponsored pension plan.



Source: 1986 Labour Market Activity Survey.

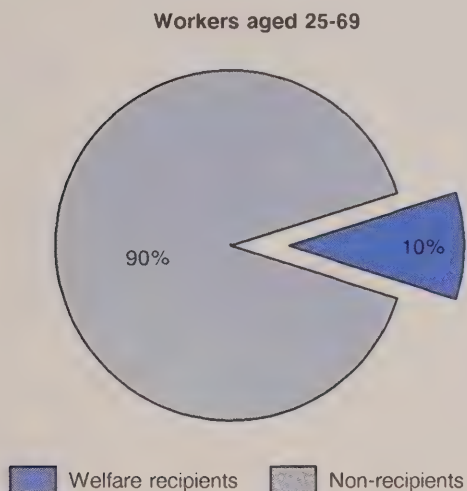
Low wages and poverty

Are low-wage earners poor? For most Canadian workers, earnings from employment are the most important source of income. Nevertheless, earnings may not be a good indicator of poverty. The likelihood of a worker being poor depends not just on his or her wage rate, but also on factors such as the number of hours worked, employment and income status of other family members, personal wealth, and the availability of non-wage labour compensation such as tips, bonuses and commissions. The LMAS does not provide data on all of these factors, but it does offer some interesting insights on the issue of the working poor.

All things being equal, one would expect low-wage workers to be more likely to collect welfare than the average worker. The data support this perception. Although minimum and sub-minimum wage earners accounted for 9% of all paid workers in 1986, they constituted 22% of the total paid workers collecting welfare sometime during that year. Among adult workers earning the minimum wage or lower, about 10% reported that they collected social assistance at some time during the year. This was five times the proportion for all adult paid workers. Women accounted for 61% of adult low-paid workers who collected welfare.

Welfare recipients among minimum wage workers, 1986

About one in ten low wage workers collected welfare sometime in 1986. This was five times the rate for all paid workers.



Source: 1986 Labour Market Activity Survey.

Compared to welfare collection, the links between low wages, receipt of unemployment insurance (UI) benefits and poverty are rather tenuous. About 21% of adult low-wage earners collected UI benefits at some time in 1986, slightly higher than the 17% for all adult paid employees. However, if their minimum and sub-minimum wages formed the basis for calculating their UI weekly benefits – which amount to 60% of insurable earnings – the weekly benefits of low-wage earners must have been very small.

Finally, about 20% of older low-wage earners (55-69 years) reported that they collected pension income at some time in 1986. However, it is impossible to determine from the LMAS what proportions of these pensioners took up low-paying jobs to make ends meet, because of inability to obtain better paying jobs, or because they preferred a low-paying job to leisure.

Conclusion

The use of minimum wage legislation as an anti-poverty measure is an issue that arises in most discussions of minimum wage laws. The issue of poverty may be irrelevant for some students earning the minimum wage or less, but the higher incidence of welfare collection by adult low-wage workers suggests the problem is real for this group. To establish the magnitude of the problem, however, one needs additional data such as the non-wage income and wealth of the worker as well as the financial position of other family members. These data, unfortunately, are not available from the 1986 LMAS. Despite this shortcoming, the LMAS does provide an important source of information for further research on low-wage earners and low-wage jobs. Future research could examine workers stuck in low-paid jobs, low-paid jobs serving as stop-gap measures, and the prevalence of moonlighting among low-wage earners. □

Table 11
Minimum wage rates and selected exemptions and exclusions to legislation

Jurisdiction	Rates for experienced adult workers			
	1986		1989	
	Rate	Effective date	Rate	Effective date
	\$		\$	
Federal	3.50	05/01/81	4.00	05/26/86
	4.00	05/26/86		
Newfoundland	4.00	01/01/85	4.25	04/01/88
Prince Edward Island	4.00	10/01/85	4.50	04/01/89
Nova Scotia	4.00	01/01/85	4.50	01/01/89
New Brunswick	3.80	10/01/82	4.50	10/01/89
	4.00	09/15/86		
Quebec	4.00	10/01/81	5.00	10/01/89
	4.35	10/01/86		
Ontario	4.00	10/01/84	5.00	10/01/89
	4.35	10/01/86		
Manitoba	4.30	01/01/85	4.70	09/01/87
Saskatchewan				
Alberta	4.50	08/01/85	4.50	08/01/85
	3.80	05/01/81		
British Columbia	3.65	03/14/81	4.50	07/01/88

	Rates for young workers and students				Exemptions (special rates)	Exclusions
	1986		1989			
	Rate	Effective date	Rate	Effective date		
	\$		\$			
under age 17	3.25 4.00	05/01/81 05/26/86	4.00	05/26/86	some trainees	
					domestics in private homes	certain named professions
employees under 18	3.25	10/01/85	4.00	04/01/89		farm labourers, babysitters
under-age employees 14-18	3.55	01/01/85	4.05	01/01/89		agricultural workers, teachers
						agricultural workers, domestics
					workers in retail food industry, domestics	some agricultural workers, recreational workers, employees on commission
students under 18 employed 28 hrs. a week or during a school holiday	3.15 3.50	10/01/84 10/01/86	4.05	10/01/89	workers in liquor and licensed establishments	some agricultural workers, teachers, some recreational workers
employees under 18	3.85	01/01/85	4.70	04/01/88	construction workers	most agricultural workers, babysitters
						farm labourers
employees under 18 not attending school	3.65	05/01/81	repealed	09/01/88	some listed professions	farm labourers, some listed professions
employees under 18 attending school	3.30	05/01/81	4.00	09/01/88		
employees 17 and under	3.00	05/14/81	4.00	07/01/88	caretakers of buildings, domestics	farm labourers, some listed professions

Notes

¹ In all four centres, the legislated general minimum wage in 1986 was \$4.00 an hour. Furthermore, the work forces of Toronto and Montreal were fairly close in number, as were those of Oshawa and St. Catharines-Niagara.

² The 12 million paid workers occupied 14.8 million paid jobs in 1986. Thus, the ratio of one to twelve remains relatively unchanged whether one examines the incidence of minimum and sub-minimum wages for workers or for jobs.

References

Labour Canada. *Employment Standards Legislation in Canada*. (No. L163-2208-88E), 1989.

West E. and M. McKee. *Minimum Wages: The New Issues in Theory, Evidence, Policy and Politics*. Economic Council, (No. EC 22-81/1980E), 1980.

Moonlighters

Maryanne Webber

Since 1980, the number of workers with two or more jobs has risen 65%, surpassing the half million mark in 1988. Their share of the work force has crept up over the years: 2.1% in 1976, 3.1% in 1980, 4.5% in 1988.

Multiple jobholders, or "moonlighters" as they are sometimes called, are a controversial group. Some employers discourage moonlighting because they fear productivity will suffer. The unions' view of moonlighting may be even less favourable if they believe that moonlighters put their health at risk in the short run and depress wages in the long run. Governments have cause for concern because of a suspected link between secondary jobs and tax evasion.¹ There is even a popular view that multiple jobholders contribute to unemployment because they "take more than their share" of available jobs.

Of all the questions surrounding moonlighters, perhaps the most immediate one is: why do they do it? That is, is it a matter of choice or economic necessity? This study looks at worker groups where moonlighting is most common in order to shed some light on this question.

Maryanne Webber is Managing Editor of Perspectives on Labour and Income. She can be reached at (613) 951-6894. Special thanks to guest editor Ken Bennett for his help.

What is multiple jobholding?

The term "moonlighting" conjures up a picture of a full-time worker in a nine-to-five job holding down a second, night-time job. This picture may have been accurate twenty years ago but today's reality is much more diverse. Technically, a multiple jobholder is any person holding two or more jobs concurrently. The teenager who waits on tables and babysits in the same week is a multiple jobholder. So is the farmer who drives a school bus and the secretary who sells beauty products. Although a person can hold three or even four jobs concurrently, most moonlighters are dual jobholders (Duchesne, 1983). A large proportion of multiple jobholders are self-employed, with a second wage or salary job.

The primary data source for this study is the Labour Force Survey (LFS). The LFS identifies a multiple jobholder's the most time each week. It need not be the job that pays the most, nor the one of longest duration. For the main job, the LFS records industry, occupation, class of worker (employee, self-employed or unpaid family worker), tenure, usual weekly hours and actual hours worked in the survey's reference week. For the second job, the LFS records usual hours, actual hours and class of worker.

The multiple jobholding rate, a measure used throughout this study, shows multiple jobholders as a percentage of all workers.

Moonlighting and self-employment

A strong link exists between multiple jobholding and self-employment. Almost half of all multiple jobholders work in their own farm or business (or help a relative who owns a farm or business as an unpaid family worker). They generally combine this activity with a wage or salary job (Table 1).²

What are the reasons for multiple jobholding among the self-employed? If the farm or business is the *main* job, a second wage or salary job could be needed to stabilize income, particularly if the business is seasonal. A farm or business as a *secondary* job is more apt to be a personal interest, almost a hobby. In some cases moonlighting can be a way of bridging from one career to another, with a paid job providing income security while a business is in its infancy.

Table 1
Single and multiple jobholding by class of worker, 1980 and 1988

	1980		1988	
	'000	%	'000	%
Single jobholders	10,373	100	11,694	100
Paid	9,010	87	10,045	86
Other*	1,364	13	1,649	14
Multiple jobholders	335	100	551	100
Both jobs paid	171	51	284	52
One paid/one other	136	41	213	39
Both jobs other	28	8	54	10

Source: Labour Force Survey

* Includes self-employment and unpaid family work.

About three-quarters of all moonlighters who combine self-employment with a salaried position are self-employed in their main job. In other words, the business or farm consumes most of their time. With this as the dominant pattern, one might suspect that the main objective of moonlighting is to boost the income derived from the business. It would be interesting to know how many small businesses could not survive without income from secondary jobs.

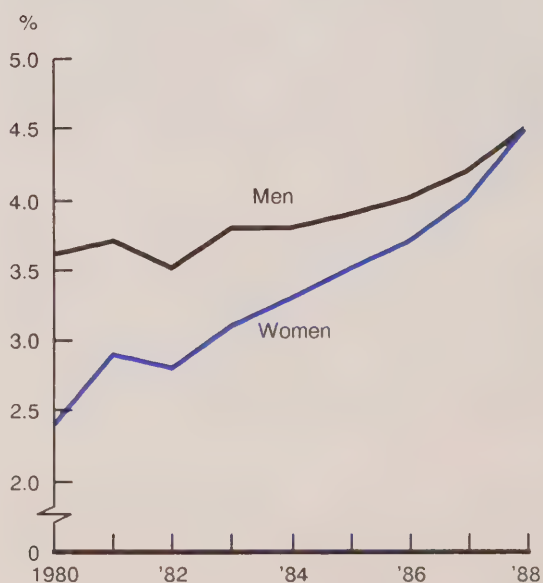
Increasing rates among women

One of most striking features of moonlighting in the 1980s is the rapid increase in the multiple jobholding rate for women.

In the 1980s, the gap between the rates for men and women progressively narrowed, disappearing altogether in 1988. This development is perhaps a manifestation of rising female labour force participation. As women's share of the labour force has increased, so has their share of self-employment and long workweeks.³ These changes and the increase in moonlighting are seemingly interconnected. Male and female multiple jobholding rates have also converged in the U.S. (Stinson, 1986). Between 1980 and 1985, the number of American women working at two or more jobs rose by almost 40%. At 62%, the increase among Canadian women in this five-year period was even sharper.

Multiple jobholding rate by sex

The gap between male and female multiple jobholding rates disappeared in 1988.



Source: Labour Force Survey.

Moonlighting and youth

The proportion of multiple jobholders in 1988 was highest among teenagers and declined with age, a finding which holds true for both men and women (Table 2). This pattern by age did not become clear until the second half of the '80s. For example, until 1983, the rates recorded for men aged 25-44 generally exceeded those for younger men.

Table 2
Multiple jobholders by age and sex

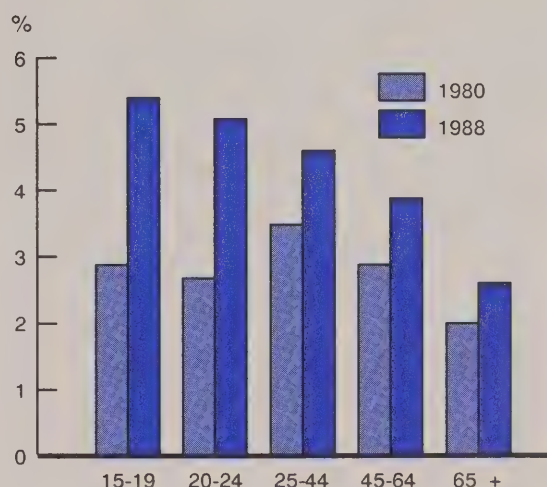
		All ages	15-19	20-24	25-44	45-64
		'000				
Multiple jobholders						
1980	Men	231	17	24	123	63
	Women	104	13	19	54	17
1988	Men	311	24	38	169	76
	Women	240	25	36	136	42
Multiple job-holding rate						
		%				
1980	Men	3.6	3.1	2.8	4.0	3.5
	Women	2.4	2.6	2.6	2.7	1.8
1988	Men	4.5	5.1	5.0	4.6	4.1
	Women	4.5	5.7	5.2	4.6	3.4

Source: Labour Force Survey

With over 40% of all full-time students working during the school year, many educators have voiced concerns about academic work increasingly taking a back seat to workplace demands. They may find the spread of multiple jobholding among young people even more disquieting: the pressure on a student's time is probably even greater when multiple jobholding is involved because the hours they work tend to be longer. Only 21% of single jobholding students in their teens work 20 or more hours a week. But among multiple jobholding students, the proportion is twice that.⁴

Multiple jobholding rates by age

Young people experienced the largest increases in multiple jobholding rates.



Source: Labour Force Survey.

The incidence of multiple jobholding is also high among students in their early twenties (Table 3). Over 70% of these moonlighters work 20 or more hours a week, a large time commitment to the work force for someone engaged in postsecondary studies. In eight years, the multiple jobholding rate for this group climbed from under 4% to 6.4%, paralleling sharp employment increases. External factors like the rising cost of education to students may be at the root of this increase. Alternatively, it may be a continuation of labour market behaviour that developed during high school days.

Not all young multiple jobholders are students. Of the 110,000 young moonlighters in 1988, half were young adults who had left school and an additional 10% were teenagers not in school.

Table 3
Multiple jobholding rates by age, sex
and student status, 1980 and 1988

	1980		1988	
	Non- students	Full-time students	Non- students	Full-time students
	%			
Both sexes				
15-19	2.7	2.7	4.7	4.8
20-24	2.5	--	4.7	6.4
Men				
15-19	2.9	3.0	4.0	4.7
20-24	2.7	--	4.6	6.6
Women				
15-19	2.5	2.4	5.6	4.8
20-24	2.4	--	4.9	6.2

Source: Labour Force Survey

How do young multiple jobholders differ from other young workers? Among teenagers, the differences in occupation and

education are negligible (Table 4). Among young adults, however, there are larger differences. For instance, multiple jobholders tend to be more highly educated than single jobholders. They are also slightly over-represented in sales and service occupations, and under-represented in processing, fabricating and machining occupations. The former tend to be low-paying jobs; the latter are often high-paying jobs.⁵ Thus, there may be an economic incentive for multiple jobholding among young adults, who are often self-supporting, which is generally absent among teens, who generally still live at home. There may also be a question of opportunity. The incidence of part-time employment is higher in sales and service jobs than in processing jobs, hence the work schedules may be more flexible and opportunities for multiple jobholding accordingly greater.

Table 4
Occupational and educational distribution of young single and multiple jobholders, 1988

	15-19			20-24	
	Single jobholders	Multiple jobholders		Single jobholders	Multiple jobholders
Number	872	50	'000	1,392	74
			%		
Occupation*	100	100		100	100
Managerial/professional	6	9		20	22
Clerical	18	18		23	24
Sales and service	50	49		25	31
Farming	6	--		3	2
Processing, etc.	8	--		15	9
Other	13	11		16	12
Education	100	100		100	100
0-8 years	7	--		3	--
9-10 years	30	28		8	--
11-13 years	48	52		41	32
Some postsecondary	13	14		21	30
Postsecondary diploma	2	--		20	21
Degree	--	--		8	11

Source: Labour Force Survey

* Refers to occupation of main job.

Moonlighting and unemployment: the geographical dimension

With unemployment at over one million, some people have argued that steps should be taken to discourage moonlighting. But do moonlighters really fill vacancies that would otherwise be available to the unemployed?

The high incidence of self-employment among multiple jobholders weakens the argument. In fact, moonlighters with two wage or salary jobs (only these jobs can ever be "vacant" and therefore available to someone else) represent only half of all multiple jobholders.⁶

Do multiple jobholders tend to live in areas of high unemployment? Provinces with high rates of multiple jobholding generally have below average unemployment rates, but a more striking spatial feature of moonlighting is its association with small urban and rural areas. In 1988, the average multiple jobholding rate for these areas was 5.5%, well above the 3.9% average for big cities (Table 5). This no doubt reflects the high rates of moonlighting in farming communities.

Who moonlights?

What were the dominant characteristics of the multiple jobholding population in 1988?

- Almost half (44%) were women.
- About 55% were aged 25-44, with the remainder evenly split between younger and older people.
- Postsecondary diploma and degree holders accounted for 38% of all moonlighters and for 46% of moonlighters in the 25-44 age group. Moonlighters tended to be better educated than single jobholders.
- One in twenty were attending school full-time.
- Half held two wage and salary jobs and another four in ten combined a wage and salary job with work on their own farm or business.
- Just over half lived in Canada's 25 metropolitan areas.
- In their primary job, one-third worked in managerial or professional occupations and one-quarter were in sales and service occupations.
- Over half earned less than \$20,000 in 1987; 17% earned \$40,000 or more.

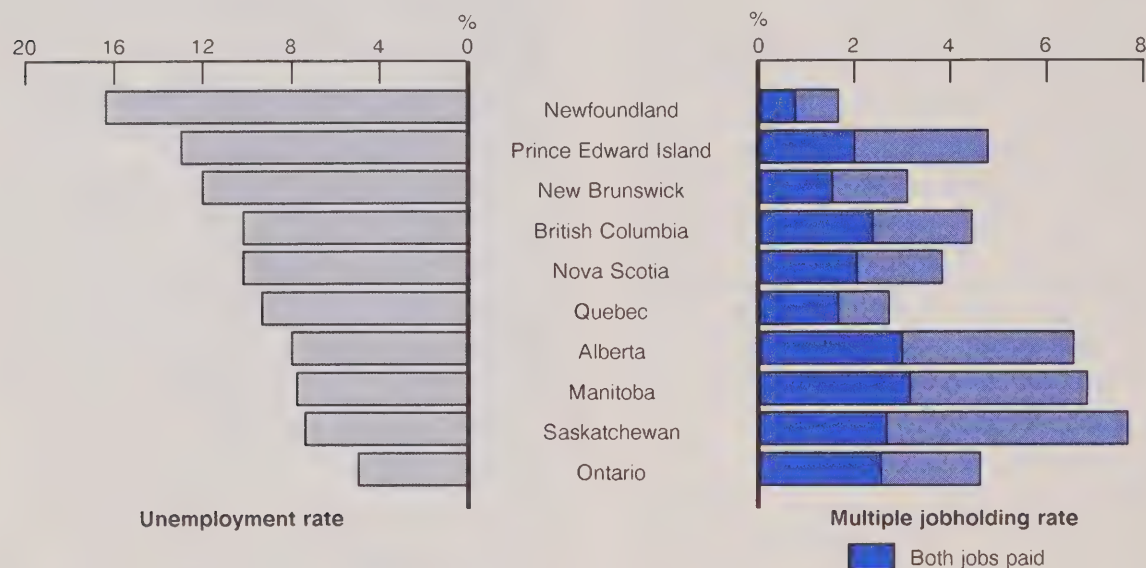
Table 5
Multiple jobholding and unemployment, metropolitan and non-metropolitan areas, 1988

	Unit	All areas	Metropolitan areas	Non-metropolitan areas
Employed	'000	12,245	7,597	4,648
Multiple jobholders	'000	551	295	256
Multiple jobholding rate				
Total	%	4.5	3.9	5.5
Both jobs paid	%	2.3	2.5	2.1
Unemployed	'000	1,031	579	451
Unemployment rate	%	7.8	7.1	8.8

Source: Labour Force Survey

Multiple jobholding and unemployment rates, 1988

The incidence of multiple paid jobs tends to be lower in provinces of high unemployment.



Source: Labour Force Survey.

Conversely, the incidence of two paid jobs is somewhat higher in big urban centres, where the unemployment rate is typically lower. The differences are not dramatic but they do suggest that multiple jobholding may play a role in easing labour market tightness.

Apart from the question of whether multiple jobholders and unemployed persons share the same labour markets, the characteristics of these two groups could differ in ways (such as training and experience) that raise doubts about how suitable the jobs occupied by moonlighters would be for the unemployed. For example, as noted earlier, multiple jobholders tend to have a higher level of education.

Full-time workers, part-time jobs

Some multiple jobholders may hold down two part-time jobs because they are unable to find one full-time job. In 1988, 154,000

moonlighters – over a quarter of the total – worked less than 30 hours in their main job (Table 6). About 77,000 of these saw their hours boosted to 30 or more (the LFS dividing line between full-time and part-time work) by virtue of the second job.

Table 6
Hours worked by multiple jobholders at their main and other job, 1988

Usual hours at other job	Usual hours at main job					
	Total	1-19	20-29	30-39	40-49	50+
'000						
All workers	551	79	75	128	214	55
1-19	405	75	55	93	145	36
20-29	97	-	18	22	44	11
30+	49	-	-	13	26	7
Full-time workers*	473	16	61	128	214	55
1-19	328	12	40	93	145	36
20-29	97	-	18	22	44	11
30+	49	-	-	13	26	7

Source: Labour Force Survey

* Working a total of 30 hours or more per week.

On the whole, multiple jobholders tend to work long hours. In 1988, nearly half of them put in 50 or more hours a week. However, about 15% worked less than 30 hours a week even when all jobs were considered, not much below the comparable proportion recorded among single jobholders (Table 7).

Table 7
Total usual hours of single and multiple jobholders, 1988

	Single jobholders	Multiple jobholders
	%	
Total	100	100
1-19	10	7
20-29	7	8
30-39	24	11
40-49	48	27
50+	12	47

Source: Labour Force Survey

Moonlighting to make ends meet

Are moonlighters driven by income inadequacy? This question is a difficult one, and the available data do not provide any direct answers. But they do offer a few clues.

For instance, nearly three-quarters of all moonlighters live in families with at least one other worker (Table 8). In addition, fully 16% of these workers are not the only moonlighter in their family. This degree of labour market activity may help to offset low wages.

Indeed, moonlighters are not generally high earners. Their average annual earnings are only slightly higher than those of single jobholders: \$23,500 versus \$22,600 in 1987.⁷

Table 8
Living arrangements of single and multiple jobholders, 1988

	Single jobholders	Multiple jobholders
	%	
Total	100	100
Unattached individuals	14	15
Family members	86	85
Other worker(s) present	69	72
No other worker(s), at least one unemployed	3	2
No other member in labour force	14	10

Source: Labour Force Survey

Without the second job, the average earnings of the multiple jobholding group would presumably be well below those of single jobholders. Moreover, the results are not uniform by sex. In 1987, male multiple jobholders earned slightly more than their single jobholding counterparts, but among women, multiple jobholders actually earned less than single jobholders (Table 9).

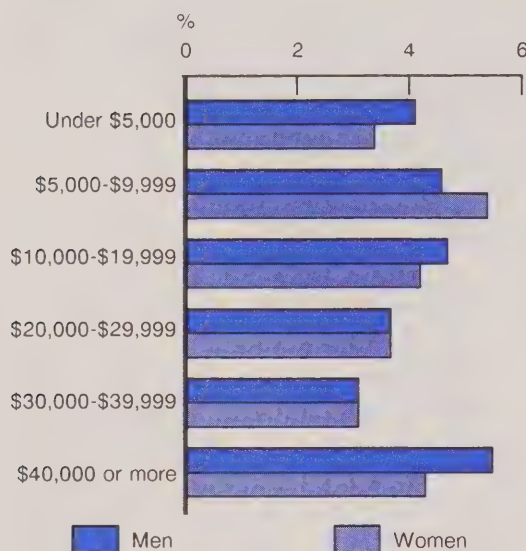
Table 9
Single and multiple jobholders in April 1988 by their average 1987 earnings

	Single jobholders	Multiple jobholders
	\$	
Average 1987 earnings	22,600	23,500
Men	27,600	29,400
Women	16,300	15,400
15-19	5,300	6,600
20-24	13,400	13,700
25-44	24,500	24,800
45-64	27,700	31,400

Source: Survey of Consumer Finances and Labour Force Survey

Multiple jobholding rate by sex and 1987 earnings

The highest rates occur among men with high earnings and women with low earnings.



Source: Survey of Consumer Finances.

Does the presence of dependent children increase the likelihood of a parent holding two jobs? Among workers aged 45-64 in 1988, the multiple jobholding rate of parents with children under 18 living at home was well over the rate for married persons with no children at home (4.9% versus 3.4%). The same is true for the 25-44 age group but, in this case, the rate for unattached individuals is higher still (Table 10). The highest rate of all, 6.9%, was recorded for unattached 20-24 year olds. In short, among married couples, those with children do have higher rates – perhaps because of greater economic need. But unattached individuals have high rates too, although their motives may differ. For example, they may have more time available to pursue a personal interest that develops into a business.

Table 10
Multiple jobholding characteristics of selected age/family status groups

	Multiple jobholding rate (April 1988)	Share of all multiple jobholders	Average 1987 earnings of multiple jobholders	Earnings ratio: multiple/single jobholders
	%	%	\$	
Age 45-64				
Head or spouse with children*	4.9	8	33,800	1.09
Head or spouse without children	3.4	12	29,700	1.11
Unattached	3.4	2	31,900	1.21
Age 25-44				
Head or spouse with children*	4.5	34	26,000	1.03
Head or spouse without children	3.8	9	24,900	1.00
Other family member	2.7	3	17,900	1.00
Unattached	4.9	10	22,600	.93
Age 20-24				
Head or spouse	4.6	4	16,000	1.03
Son or daughter	4.1	5	11,000	.99
Unattached	6.9	4	14,500	.93
Age 15-19				
Son or daughter	4.3	6	6,700	1.32

Source: Survey of Consumer Finances and Labour Force Survey

* Children under age 18 living at home.

Regarding motives for moonlighting, an American study of multiple jobholding asked respondents outright what their reasons were:

"About 41 percent of persons working more than one job in May 1985 did so in order to meet regular expenses or pay off debts, and 13 percent cited a desire to save for the future. Another 17 percent indicated that their principal reason for moonlighting was to get experience or build up a business, while 29 percent reported various other reasons." (Stinson, 1986)

Thus the most important reason for multiple jobholding among Americans is perceived economic need. It would not be surprising if Canadians see moonlighting in the same way, but existing data cannot tell us whether this is the case.

Conclusion

When it comes to moonlighting, the question of choice versus necessity recurs throughout this study. Many moonlighters have their

own farm or business. For some, a paid job may be essential to keep the business alive; for others the business may be a secondary concern undertaken for reasons of personal interest. Young people have particularly high multiple jobholding rates. For high school students, moonlighting may generally be a matter of choice. But is it so for postsecondary students? Among married people, multiple jobholding is more common for those with children at home than for those without – but it is also high among unattached individuals.

In the U.S., moonlighting is often associated with financial need: many workers say they need two jobs to make ends meet, or to save for the future. Canadian moonlighters may be motivated by similar considerations – despite the second job, their income levels are only slightly above those of single jobholders. □

Notes

¹ The connection between secondary jobs and income tax evasion was alluded to in a "taxonomy of people in concealed employment" presented in Chapter III of *OECD Employment Outlook*, 1986. In another study, Alden and Spooner (1982) reviewed the reasons underlying interest in the multiple jobholding phenomenon and, in that context, mentioned a perception that secondary jobs are a significant element in the underground economy.

² In this study, the self-employed are defined as persons who work for themselves, with or without paid help, in an incorporated or unincorporated business. A second group, unpaid family workers, are employed without pay in a farm or business owned or operated by a related household member. (Unpaid family workers only account for about 1% of total employment.) The largest group, paid workers or employees, are persons who work for others in exchange for wages, salary, commission or payment in kind. They are sometimes referred to as wage or salary workers in this study.

Self-employment has expanded rapidly in the '80s and some readers may wonder if this expansion triggered the increase in the number of moonlighters. While a tendency among the self-employed to hold a second job contributed somewhat, people with two wage or salary jobs were responsible for over half of the 1980-1988 increase in the number of multiple jobholders (113,000 of 216,000). In short, the growth of multiple jobholding is more fundamental, affecting every class of worker.

³ Self-employment among women increased 118% from 1975 to 1986, compared with 39% among men (Cohen, 1988). Over the ten years from 1976 to 1985, the number of female employees with workweeks of 50 or more hours rose 104%. The increase for men was only 31% (Gower, 1986).

⁴ Survey results on the hours worked by single and multiple jobholding students are based on averages calculated over the eight peak school attendance months in 1988: January to April and September to December.

⁵ According to the Labour Market Activity Survey, the average hourly wage for sales and service jobs occupied by 20-24 year-olds was \$5.84 in 1986. The corresponding figure for processing, machining and fabricating occupations was \$7.81.

⁶ In addition, for three-quarters of the 213,000 moonlighters who combined a business with a wage and salary job in 1986, the latter was only a secondary job, generally involving a limited number of hours per week.

⁷ These results should be interpreted with caution. The annual earnings data refer to people who were single or multiple jobholders in April 1988, when the 1988 Survey of Consumer Finances was conducted. Earnings data refer to the 1987 calendar year. People holding two jobs in April 1988 may not have done so in 1987. People with no earnings in 1987 were excluded from the analysis.

References

Alden, J. and R. Spooner. *Multiple Job Holders: An Analysis of Second Jobs in the European Community*. Office for Official Publication of the European Communities, March 1982.

Duchesne, D. "Multiple Jobholders by Industry and Occupation: 44" (71-X-512). Series (71-601). Statistics Canada, March 1985.

Stinson, J.F. Jr. "Moonlighting by Women Jumped to Record Highs," *Monthly Labor Review*. U.S. Department of Labor, November 1986, pp. 22-25.

Cohen, G. "Enterprising Canadians: The Self-employed in Canada." (71-536), Statistics Canada, 1988.

Gower, D. "Characteristics of Persons with Long Workweeks", *The Labour Force* (71-001). Statistics Canada, September 1986.

Organisation for Economic Co-operation and Development. *OECD Employment Outlook*. OECD, 1986.

Disabled workers

Gary L. Cohen

In recent years, the role of disabled workers in the Canadian labour market has increased: they have become more accepted, technology has improved the aids they may require to participate, and special training programmes have become more readily available.

In June 1986, one out of every 30 workers in Canada had a disability that limited the kind or amount of work he or she could do. Nationwide, there were almost 380,000 such workers.

Like their non-disabled counterparts, disabled persons work at a wide variety of occupations, in many different industries, and in all provinces and territories. They also possess a wide range of employment-related qualifications. This article examines the characteristics of disabled workers and compares their employment situation to that of the non-disabled.

Who are the disabled workers?

In June 1986, the number of disabled men aged 15-64 was slightly smaller than the number of women: 616,000 compared with 640,000. However, the number of employed disabled men (236,000) was much greater

than the number of women (142,000). Thus, almost two-fifths of disabled men were employed compared with only one-fifth of disabled women. For both sexes combined, the employment ratio¹ was 30%. In comparison, the employment ratio for the non-disabled population was 70% (Table 1).

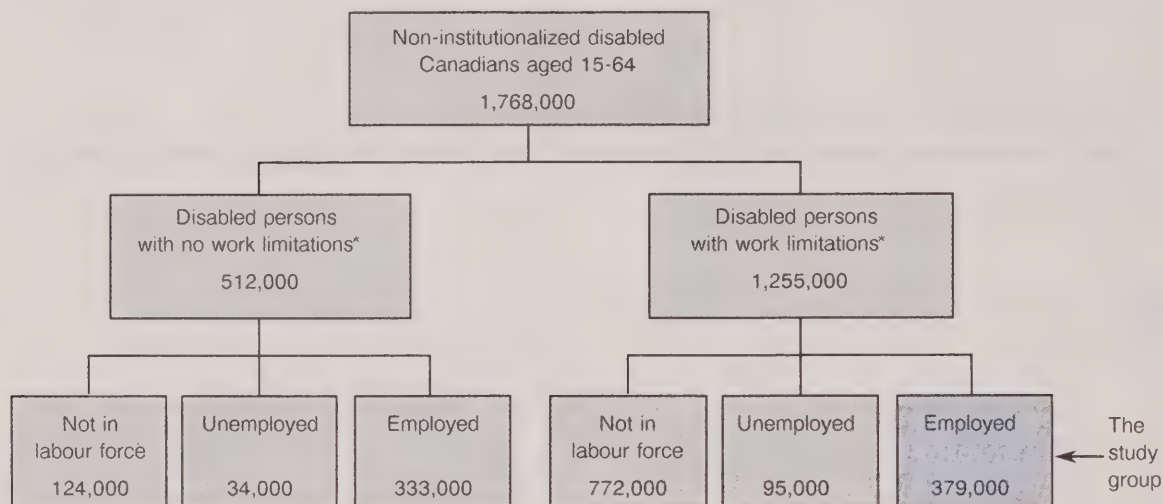
Not surprisingly, the disabled population is older on average than the non-disabled population. In 1986, fewer than 10% of disabled persons were aged 15-24 while almost 40% were aged 55-64; the comparable proportions for the non-disabled population were 26% and 11% respectively.

Employment ratios for disabled persons, like those of their non-disabled counterparts, vary considerably by age. The highest rate (44%) occurred among those aged 25-44. The ratio for youth was considerably lower (31%), probably because many were still attending school and were not active in the labour market. Only one of every six disabled persons aged 55-64 was employed. For each age group, the employment ratio for disabled men substantially exceeded that for disabled women.

About 45% of disabled workers had a single disability only; the remainder had multiple disabilities. The employment ratio for those with a single disability was 37%, compared with 27% for those with multiple disabilities. There was not much difference in employment ratios by nature of disability; persons with seeing disabilities were least likely to be employed.²

Gary L. Cohen is with the Labour and Household Surveys Analysis Division. He can be reached at (613) 951-4623.

Disabled persons, June 1986



* About 9,000 persons with work limitations and 22,000 without work limitations did not report their labour force status.

Source: Health and Activity Limitation Survey.

The Health and Activity Limitation Survey

In May 1980, the Special Parliamentary Committee on the Disabled and the Handicapped was formed to report to the House of Commons on the needs and concerns of disabled persons in Canada. One of the recommendations in the Committee's report, *Obstacles* (1981), was that Statistics Canada develop a national data base on disability. Statistics Canada has since undertaken major data collection activities to support this goal: the most recent, the Health and Activity Limitation Survey (HALS), was conducted as a follow-up to the 1986 Census.

The World Health Organization defines disability as "any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being" (1980). In practice, HALS used a functional limitation approach for the adult population; it defined disability in terms of

difficulties in performing routine tasks of daily living such as walking, climbing stairs, feeding oneself or reading a newspaper. In addition, the limitation must have lasted (or be expected to last) a minimum of six months. Individuals were not considered disabled if they used a technical aid that completely eliminated the limitation.

HALS asked all disabled persons whether they were limited in the kind or amount of work they could perform because of their health problem or condition. Only those who responded "yes" were defined as being limited at work and are the subjects of this article. While the data in this study relate only to disabled persons with work limitations, the phrase "disabled persons" is generally used instead for brevity.

HALS also collected data on disabled children and senior citizens, and disabled persons residing in institutions. For further information about HALS, see: *The Health and Activity Limitation Survey User's Guide* (1988) or contact the Disability Database Program, Statistics Canada, (613) 951-0025.

Table 1
Employment by age and sex, June 1986

	Disabled persons		Non-disabled persons	
	Number	Employment ratio	Number	Employment ratio
	'000	%	'000	%
Both sexes				
15-64 years	379	30	10,641	70
15-24	33	31	2,228	57
25-34	83	45	3,163	76
35-44	95	43	2,674	81
45-54	91	34	1,627	76
55-64	77	16	949	55
Men				
15-64 years	236	38	6,041	80
15-24	18	36	1,147	58
25-34	47	49	1,799	88
35-44	56	53	1,523	92
45-54	61	45	946	90
55-64	55	24	627	75
Women				
15-64 years	142	22	4,600	60
15-24	15	26	1,081	56
25-34	36	40	1,364	65
35-44	39	33	1,151	70
45-54	30	23	681	63
55-64	23	9	322	36

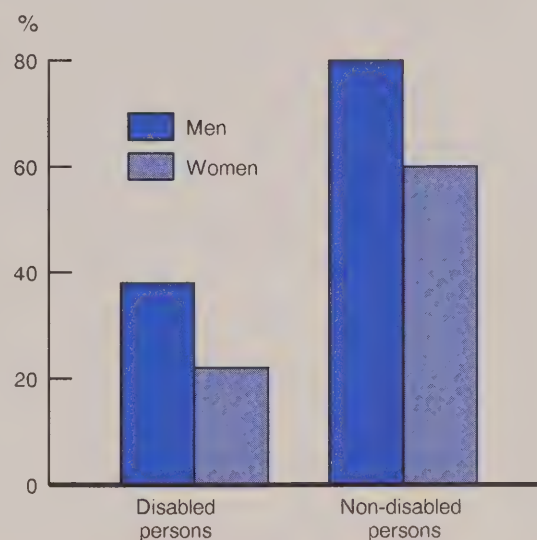
Source: Health and Activity Limitation Survey

Where do they work?

Across Canada, employment ratios for disabled persons varied substantially. In Eastern Canada, especially Newfoundland and Quebec, rates were much lower than the national average, whereas rates in the Prairie provinces and the territories far exceeded the average. The employment ratios for disabled women in Newfoundland and Quebec were particularly low: barely one in eight were employed (Table 2).

Employment ratio, June 1986

For both the disabled and the non-disabled populations, men were more likely to be employed than women.



Source: Health and Activity Limitation Survey.

This pattern is essentially similar to that of provincial and territorial employment for the non-disabled population. It suggests that for disabled persons, as for the population at large, the likelihood of employment may be closely related to the level of employment opportunity in any specific locale.

The majority of disabled workers lived in urban areas, mainly in metropolitan centres. However, there was little difference between the employment ratios for disabled persons in urban and rural areas.

Table 2
Employment ratios by province and territory, June 1986

	Employment ratio					
	Disabled persons			Non-disabled persons		
	Both sexes	Men	Women	Both sexes	Men	Women
	%					
Canada	30	38	22	70	80	60
Newfoundland	18	24	12	53	64	42
Prince Edward Island	29	38	19	67	75	58
Nova Scotia	30	37	22	62	75	51
New Brunswick	26	34	17	64	73	55
Quebec	20	28	12	64	74	54
Ontario	31	40	23	75	85	66
Manitoba	44	57	33	75	85	65
Saskatchewan	43	52	33	73	85	61
Alberta	40	46	35	74	83	65
British Columbia	34	41	27	67	76	57
Yukon	41	40	41	78	82	74
Northwest Territories	43	50	35	79	84	72

Source: Health and Activity Limitation Survey

How well educated are they?

Disabled persons tend to have lower educational attainment than the non-disabled population. In 1986, one in three disabled persons had no more than a primary school education (less than Grade 9) and 61% had not completed high school – proportions well above those for the non-disabled population. Similarly, only 4% of disabled persons had a university degree compared with 11% of the non-disabled (Table 3).

In part these differences may reflect the fact that the disabled population is older on average than the non-disabled population, and older persons tend to have less formal education. But for each age group, a higher proportion of persons with disabilities had only a primary school education.

How does education affect their employment? For both disabled and non-disabled Canadians, the employment ratio rose substantially as educational attainment

Table 3
Educational attainment, June 1986

	Disabled persons	Non-disabled persons
	%	
All levels of education	100	100
Primary only (0-8 years)	33	11
Some high school	27	27
High school graduation	8	14
Trades certificate	10	11
Some postsecondary	8	12
Postsecondary certificate or diploma	9	14
University degree	4	11

Source: Health and Activity Limitation Survey

increased, but this pattern was more pronounced for persons with disabilities. Among the disabled population, 17% of persons with only primary schooling were employed, compared with 50% of those with university degrees; the comparable figures for non-disabled persons were 55% and 87% (Table 4).

Table 4
Education and employment, June 1986

	Employment ratio	
	Disabled persons	Non-disabled persons
	%	
All levels of education	30	70
Primary only (0-8 years)	17	55
Some high school	30	57
High school graduation	34	69
Trades certificate	41	82
Some postsecondary	39	75
Postsecondary certificate or diploma	46	80
University degree	50	87

Source: Health and Activity Limitation Survey

Persons who became disabled before completing their education were more likely to be employed (37%) than those disabled after they had completed their education (28%). As well, workers disabled before completing their education tended to have higher levels of educational attainment than those disabled after completing their education. This raises some interesting, but as yet unanswered, questions about the relationship between disability and the pursuit of higher education.

What kind of work do they do?

Disabled workers' share of total employment³ was largest in agriculture, health and welfare services, and other primary industries (fishing, forestry and mining). They were least prevalent in the finance, insurance and real estate industry, especially in banks, trust companies and insurance carriers (Table 5).

The prevalence of disabled workers in agriculture is perhaps related to the high proportion of self-employment in that industry, that is, persons who work for themselves may find it somewhat easier to continue being employed after becoming

Table 5
Employed disabled persons by industry, June 1986

	Number	Share of total employment
	'000	%
All industries*	379	3.3
Agriculture	19	4.7
Other primary industries	12	4.1
Manufacturing	66	3.5
Construction	24	3.4
Transportation, communication and other utilities	22	2.4
Wholesale trade	15	2.8
Retail trade	43	3.0
Finance, insurance and real estate	14	2.2
Education and related services	17	2.3
Health and welfare services	37	4.3
Services to business management	14	2.6
Accommodation and food services	18	2.7
Other services†	22	3.4
Public administration and defence	27	3.4

Source: Health and Activity Limitation Survey

* Includes some workers who were not coded to a specific industry. Industry coding was based on the 1970 Standard Industrial Classification.

† Religious organizations, amusement and recreation services, personal services (including private households) and miscellaneous services.

disabled. (Disabled workers are somewhat over-represented among the ranks of the self-employed.)

Disabled workers were also active in most occupations. They represented a smaller than average share of total employment among senior and middle managers, and professionals.⁴ On the other hand, disabled workers were somewhat over-represented among the ranks of skilled artisans, semi-skilled workers and other manual workers. They also made up a larger than average share of the semi-professional and technicians group (Table 6).

Table 6
Employed disabled persons by
occupation, June 1986

	Number	Share of total em- ployment
	'000	%
All occupations*	379	3.3
Senior managers	3	1.5
Middle managers	19	2.2
Professionals	33	2.2
Semi-professionals and technicians	20	3.8
Supervisors	9	2.9
Foremen/ forewomen	10	2.9
Clerical workers	49	2.6
Sales workers	29	3.1
Service workers	31	3.0
Skilled crafts and trades persons	37	4.0
Semi-skilled workers	38	4.1
Other manual workers	68	4.3

Source: Health and Activity Limitation Survey

* Includes some workers who were not coded to a specific occupation. Occupation coding was based on "job equity concepts" (see note 4).

These differences between the occupational distribution of disabled workers and their non-disabled counterparts perhaps reflect, in part, differences in educational attainment. However, even highly educated disabled workers, that is, those with a postsecondary certificate or diploma or a university degree, were less likely to be employed as managers or professionals than similarly educated non-disabled workers.

How much do they earn?

Disabled workers were more likely to have lower employment income than their non-disabled counterparts. More than two-fifths of disabled workers earned less than \$10,000 in 1985, compared with only one-third of non-disabled workers. As well, only 16% of disabled workers earned \$30,000 or more, compared with 22% of the non-disabled.⁵

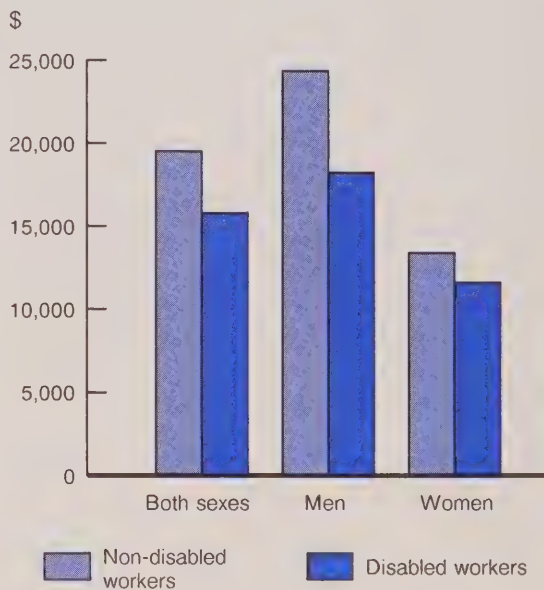
Table 7
1985 earnings distribution

	Disabled workers	Non-disabled workers
	%	
All levels	100	100
Less than \$10,000	41	33
\$10,000 - \$19,999	24	25
\$20,000 - \$29,999	19	21
\$30,000 and over	16	22

Source: Health and Activity Limitation Survey

Average 1985 earnings

The earnings gap between disabled and non-disabled workers was much larger for men than women.



Source: Health and Activity Limitation Survey.

Average employment income for persons with disabilities (\$15,900) was some 19% lower than the average of \$19,600 earned by non-disabled workers. The difference was more pronounced for men (in excess of \$6,000) than for women (less than \$2,000).

In part, this inequality likely reflects the educational and occupational differences between disabled and non-disabled workers. The gap in earnings narrows substantially for more highly educated disabled workers. In fact, 1985 average earnings for disabled women with a university degree were higher than those of similarly educated non-disabled women.

However, another factor in the determination of average earnings is work schedule. Non-disabled workers were more likely than disabled workers to be employed on a full-time, full-year basis⁶ (59% compared with 49%) and such workers typically have higher levels of earnings than part-year or part-time workers.

Conclusion

The participation of disabled persons in the work force will likely expand in the future if the equality of social and economic opportunity continues to rise. And for disabled persons, as for the population at large, education will undoubtedly continue to be a key factor for success in the labour market. □

Disabled workers not limited at work

The Health and Activity Limitation Survey, in addition to identifying 1.3 million disabled persons who were limited in their capacity to work, also identified 512,000 disabled Canadians who reported that their disability did *not* limit their work.

This "disabled but not limited at work" population tended to be younger than the "disabled and limited" group: less than one-quarter were aged 55-64 compared with almost 40%. As well, there were more men than women among the disabled but not limited group, the opposite of the disabled and limited population.

Persons disabled but not limited at work were more likely to be employed than their disabled and limited counterparts. In fact, the employment ratios for this group, 75% for men and 53% for women, were similar to the ratios for the non-disabled population.

Two-thirds of the disabled but not limited at work population had a single disability only, compared with one-third of persons disabled and limited. The employment ratios for both the single-disability and the multiple-disability groups were some 30 percentage points higher for the disabled but not limited population.

Educational characteristics of persons who were disabled but not limited at work tended to resemble those of the non-disabled population. Employment ratios for disabled workers who did not report work limitations, like those for the non-disabled and the disabled but limited populations, rose rapidly as the level of educational attainment increased.

Notes

¹ The employment ratio, also known as the employment/population ratio, measures the number of employed persons as a percentage of the population.

² The following are the types of disability as defined by HALS:

Mobility: limited in ability to walk, move from room to room, carry an object for 10 metres, or stand for long periods

Agility: limited in ability to bend, dress or undress oneself, get in and out of bed, cut toenails, use fingers to grasp or handle objects, reach, or cut own food

Seeing: limited in ability to read ordinary newsprint or to see someone from four metres, even when wearing glasses

Hearing: limited in ability to hear what is being said in conversation with one other person or two or more persons, even when wearing a hearing aid

Speaking: limited in ability to speak and be understood

Other: limited because of learning disability or emotional or psychiatric disability, or because of developmental delay

Unknown: limited but nature not specified

³ Total employment includes all disabled workers, both with and without work limitations, as well as the non-disabled.

⁴ Occupational coding is based on Canadian Job Equity concepts. Groupings were determined on the basis of three factors: the nature and scope of the duties and responsibilities of each occupation; the average weighted level of the workers' education in each occupational group; and a score related to the general training and professional requirements of each occupation according to the Canadian Classification and Dictionary of Occupations. For further information, see: *Employment Equity Availability Data Report on Designated Groups* (technical appendix).

⁵ Since HALS was conducted in June 1986, its income data relate to the 1985 calendar year.

⁶ Full-time workers are those who usually work 30 or more hours per week. Full-year workers are those employed for 49 or more weeks per year.

References

"Obstacles." Report of the Special Parliamentary Committee on the Disabled and the Handicapped, February 1981.

World Health Organization. "International Classification of Impairments, Disabilities, and Handicaps." 1980.

Statistics Canada. "The Health and Activity Limitation Survey: User's Guide." (82-602E), June 1988.

Cohen, G. L. "Disability and the Labour Force: An Analysis of Disabled Persons Not in the Labour Force." Statistics Canada. October 1989.

Employment and Immigration Canada. "Employment Equity Availability Data Report on Designated Groups." December 1986.

Immigrants in product fabricating

Jane Badets and Nancy McLaughlin

Canada's immigrants are located throughout the occupational spectrum. Some are in high-skill occupations such as professional and managerial, others are in low-skill jobs such as services and product fabricating. Immigrants are, however, over-represented in certain occupations. Product fabricating is one such occupation. According to the 1986 Census, immigrants represented 18% of all workers, but 28% of workers in fabricating jobs – the highest representation of immigrants in any major occupational group.

This study profiles immigrants working in product fabricating. The key questions examined are: how do they differ from non-immigrant workers in the same occupation, and do the two groups earn comparable incomes?

Fabricating jobs highly concentrated by industry

Although fabricating workers were located in a variety of industries, three-quarters were in manufacturing and retail trade.

Jane Badets is with the Housing, Family and Social Statistics Division. She can be reached at (613) 951-2561. Nancy McLaughlin is with the Labour and Household Surveys Analysis Division and can be reached at (613) 951-0292.

What is product fabricating?

The product fabricating, assembling and repairing group is one of 22 major occupational groups in the 1980 Standard Occupational Classification (SOC). Product fabricating, assembling and repairing includes the following seven minor groups:

- fabricating and assembling of metal products
- fabricating, assembling, installing and repairing of electrical, electronic and related equipment
- fabricating, assembling and repairing of wood products
- fabricating, assembling and repairing of textile, fur and leather products (textile or garment workers)
- fabricating, assembling and repairing of rubber, plastic and related products
- mechanics and repairers
- other related fabricating occupations

Immigrants are especially prominent among textile or garment workers – workers in pattern-making, marking and cutting occupations; tailors and dressmakers; furriers; milliners, hat and cap makers; shoemaking and repairing occupations; upholsterers; and sewing machine operators.

In the 1986 Census, the data source used in this study, all persons who worked at any time since January 1, 1985 were asked to indicate their occupation. All the data in this study, unless otherwise stated, pertain to this population.

"Product fabricating, assembling and repairing" is the full title of this major occupational group. A shorter version, "product fabricating" or "fabricating", is used throughout this study.

For further information on this occupational group and its components, see *Standard Occupational Classification, 1980* (12-565E).

Two-thirds of immigrant fabricating workers were in manufacturing compared with 49% of non-immigrants (Table 1). Within manufacturing, immigrant workers actually dominated the clothing industry¹ (53%).

Table 1
Product fabricating workers by industry, 1986

	Total	Immi- grants	Non-im- migrants
	%		
Total	100.0	100.0	100.0
Manufacturing	54.2	67.4	49.0
Retail trade	20.2	14.9	22.3
Transportation and communication	6.4	4.3	7.2
Wholesale trade	5.8	4.1	6.5
Community, business and personal services	5.8	5.1	6.1
Other	7.7	4.2	9.0

Source: 1986 Census of Canada

Over one-quarter of fabricating workers were immigrants

The highest proportion of immigrants² was in product fabricating, where they represented 28% of all workers (Table 2). Immigrant women were particularly concentrated in product fabricating occupations, accounting for 43% of all women in these jobs. Immigrants made up 23% of all men in product fabricating, but they were also represented in professional and processing occupations in about the same proportion.

Recent immigrants

In the past, product fabricating was a traditional source of employment for new immigrants to Canada and it continues to be so. Since 1983, only service jobs have ranked higher than fabricating jobs as the intended

Table 2
Immigrant workers by occupation, 1986

	Total	Immigrants	
	'000	'000	%
Total	13,858	2,553	18.4
Managerial, administrative and related	1,401	271	19.4
Professional and related	1,979	387	19.6
Clerical	2,542	396	15.6
Sales	1,267	204	16.1
Service	1,851	372	20.1
Primary	790	84	10.7
Processing	779	177	22.7
Product fabricating	1,016	288	28.3
Construction	805	147	18.3
Other	1,427	226	15.9

Source: 1986 Census of Canada

occupation of immigrant workers entering Canada's labour market.³ About one in every ten immigrant workers entering this country from 1980 to 1987 was destined for a fabricating job. This ratio has remained relatively constant during the past decade.

Major metropolitan centres were home to most immigrants in fabricating

Nearly two-thirds of the immigrants in fabricating lived in Toronto, Montreal or Vancouver. In comparison, just over half of Canada's total immigrant population, and less than one-third of the total population, resided in these metropolitan areas.

Of the three metropolitan centres, Toronto depended the most on immigrant workers to fill fabricating jobs. Over half of the men and three-quarters of the women who worked in fabricating in Toronto were immigrants. In fact, immigrants accounted for 94% of all tailors and sewing machine operators in the Toronto region.

Kind of work

What kind of work did immigrants do within the fabricating occupations? More than two-thirds of immigrant women worked in textile products – in other words, as garment workers (Table 3). These women accounted for almost half of all female garment workers; the majority were sewing machine operators.⁴

Table 3
Women in product fabricating occupations, 1986

	Total	Immigrants	%
Total	257,400	110,600	43.0
Metal products	21,100	7,100	33.5
Electrical and electronic products	31,300	11,800	37.6
Wood products	6,700	2,200	33.0
Textile, fur and leather products	158,200	76,600	48.4
Rubber and plastic products	11,500	4,000	35.0
Mechanics and repairers	5,800	1,100	19.7
Other	22,800	7,800	34.1

Source: 1986 Census of Canada

Table 4
Men in product fabricating occupations, 1986

	Total	Immigrants	%
Total	758,900	177,300	23.4
Metal products	89,400	25,900	29.0
Electrical and electronic products	110,500	26,700	24.1
Wood products	46,500	12,700	27.3
Textile, fur and leather products	47,600	22,200	46.7
Rubber and plastic products	28,800	6,300	21.8
Mechanics and repairers	361,200	64,000	17.7
Other	74,900	19,600	26.2

Source: 1986 Census of Canada

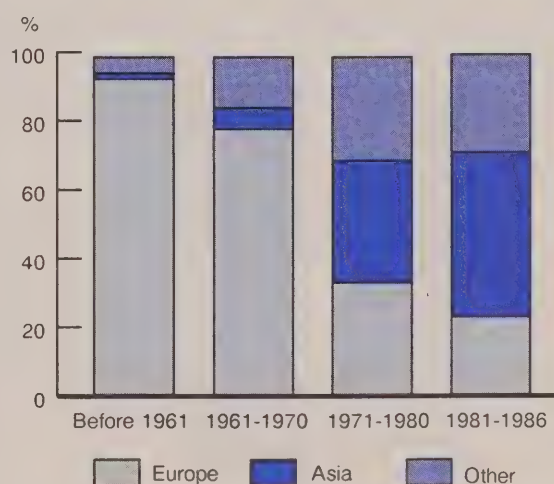
Although the largest number of immigrant men worked as mechanics, they represented only 18% of this minor group (Table 4). However, immigrant men made up almost half of male garment workers. As garment workers, immigrant men performed relatively diverse types of work. For example, more than one-quarter of immigrant men were sewing machine operators, a further 19% were upholsterers, 16% were pattern-makers, and 11% were foremen.

Close to two-thirds born in Europe

Almost two-thirds of immigrants in product fabricating were born in Europe, as were most of Canada's immigrant workers. This

Immigrant population in fabricating by place of birth and period of immigration, 1986

Among immigrants arriving since 1961, the proportion from non-European countries has increased.



Source: 1986 Census of Canada.

reflects Canada's long history of predominately European and British immigration. Over half of the European-born in fabricating were from Southern Europe (particularly Italy).

But the picture is changing: the proportion of immigrants from non-European countries, especially Asian, has increased among those who have arrived since 1961. Among recent immigrants in product fabricating, the Asian-born were the largest group, accounting for almost half of those coming to Canada between 1981 and 1986. Of the recent Asian immigrants in fabricating, the largest group were from South East Asia, especially the Philippines and Vietnam.

An older population

The majority of Canada's immigrants came to this country as young adults. Because of

Workers in fabricating, 1986

In fabricating, immigrants tend to be older than non-immigrants.



Source: 1986 Census of Canada.

this, and because any children born in Canada are non-immigrants, the immigrant population had a relatively low proportion of youth.

Immigrants in fabricating also tended to be older – in part because the majority came to Canada before the 1970s. In 1986, 52% of immigrants in fabricating were between the ages of 35 and 54, compared with one-third of non-immigrants. This age distribution was similar for both male and female workers.

Lower levels of educational attainment

Immigrant workers in fabricating tended to have lower levels of education than non-immigrants.⁵ Higher proportions of non-immigrants had high school, trades and non-university certificates or university degrees.

Percentage of population in fabricating by educational attainment, 1986

Immigrants in fabricating had higher proportions of workers with no formal educational certificate than did non-immigrants.



Source: 1986 Census of Canada.

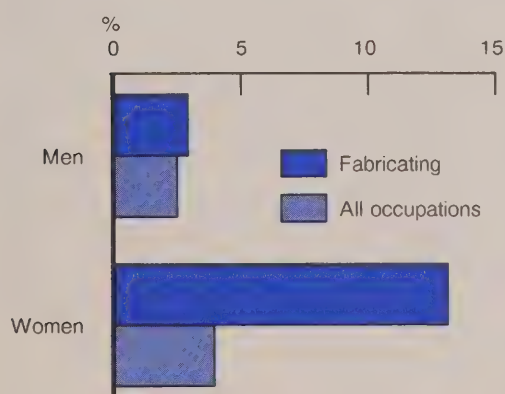
Immigrant women were the largest group with no degree, certificate or diploma: 74% compared with 65% of non-immigrant women and 41% of immigrant men. But regardless of immigrant status, the majority of women in fabricating occupations had no certificate or diploma, while the majority of men did. Typically, these male workers held a trades certificate.

Official language

Immigrants may come to Canada either as sponsored family members, as refugees, or as independent applicants. Since 1967, independent applicants have been rated on a point system based on several criteria, including knowledge of Canada's official languages.⁶ For immigrant workers, the ability to speak one or both of Canada's official languages affects the type of employment they can obtain.⁷

Immigrants speaking neither english nor french, 1986

Immigrant women in fabricating were most likely to speak neither English nor French.



Source: 1986 Census of Canada.

Although most immigrant workers in product fabricating could speak one or both of Canada's official languages, 7% were unable to speak either. Fully 13% of immigrant women in fabricating spoke neither English nor French, a large proportion compared with immigrant women in other occupations (3%) and immigrant men in fabricating (also 3%). Among all employed immigrant women who could speak neither English nor French, one-third were in product fabricating.

Employment income

All the factors just discussed – age, education, kind of work, knowledge of English and French – as well as the length of residence in Canada, contribute to the differences in the employment incomes of immigrants and non-immigrants. These differences are explored in the following sections.

The average employment income⁸ of immigrant women in fabricating was lower than the income of non-immigrant women in this occupation. The reverse was true for men: immigrants earned more.

Table 5
Average employment income of workers in product fabricating, 1985*

	Women	Men	Female/ male ratio
	\$		
Immigrants	14,400	26,600	0.54
Non-immigrants	15,600	25,800	0.61

Source: 1986 Census of Canada

* Average employment incomes in this table and subsequent tables are for persons who worked full-year, full-time in 1985.

Immigrant women in product fabricating earned just over half of the income of immigrant men, while non-immigrant women earned 61% of non-immigrant men's earnings. Differences in the kind of work performed within product fabricating likely contribute to these disparities in female/male earnings.

Age

For both immigrants and non-immigrants in product fabricating, average employment incomes were lowest for young workers (aged 15-24 years), peaked for those aged 35-44, and decreased significantly for those aged 65 years and over. Although the average income of immigrant men was higher than that of non-immigrant men, the picture changes when the data are viewed by age: the incomes of non-immigrants are generally higher than those of immigrants (Table 6). In other words, because immigrants tend to be older, their overall average income is higher.

Table 6
Average employment income by age, 1985

	Women		Men	
	Immigrants	Non-immigrants	Immigrants	Non-immigrants
	\$			
All ages	14,400	15,600	26,600	25,800
15-24	11,900	12,600	16,500	17,300
25-34	13,700	15,900	24,100	25,600
35-44	14,800	16,600	28,400	28,600
45-54	14,800	16,300	28,300	28,400
55-64	14,700	16,300	27,100	26,900
65 and over	13,600	13,000	22,000	20,200

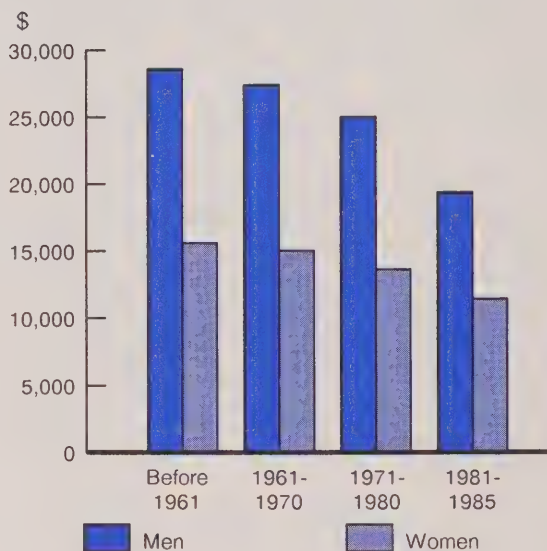
Source: 1986 Census of Canada

Period of immigration

In general, the economic position of immigrants improves the longer they reside in

Average employment income for fabricating by period of immigration, 1985

For both male and female immigrants, average employment income was higher the longer they were in Canada.



Source: 1986 Census of Canada.

Canada. This is also true for product fabricating workers. The average employment incomes of both male and female immigrants were higher the longer they were in Canada. This pattern held true for all age groups.

Incomes peaked for immigrant men aged 35-44 regardless of period of immigration. Among women, there was no clear pattern: incomes showed little variation by age within each period of immigration. This uniformity was likely due to the high percentage of women in the low-skill jobs, such as textile fabricating. In these jobs, seniority and work experience have little impact on wages.

Kind of work

Within an occupational group as diverse as product fabricating, one can expect to find significant differences in average

employment income. Among both immigrants and non-immigrants, over 80% of the full-year, full-time workers in product fabricating were concentrated in four minor groups: fabricating of metal products; electrical, electronic and related equipment; textile, fur and leather products; and mechanics and repairers (Table 7).

Table 7
Average employment income by occupation (minor groups) and sex, 1985

	Women		Men	
	Immi-grants	Non-immi-grants	Immi-grants	Non-immi-grants
	\$			
Fabricating:				
Metal products	18,000	19,900	29,200	28,800
Electrical	17,500	18,800	27,900	27,500
Textile	13,100	12,800	19,700	18,900
Mechanics and repairers	18,300	20,400	28,800	26,200

Source: 1986 Census of Canada

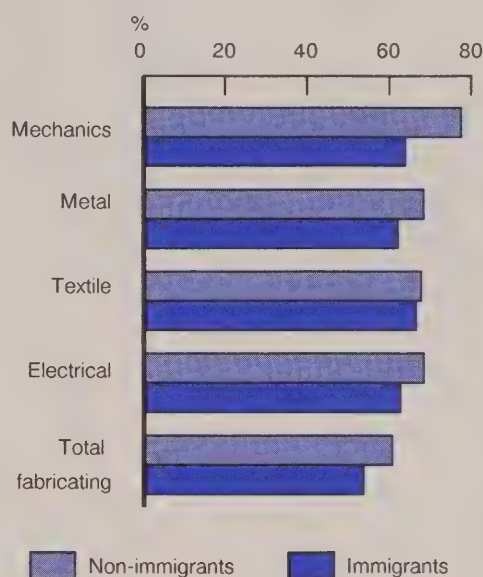
By far the lowest employment incomes for both immigrant and non-immigrant women were associated with textile fabricating. Women in product fabricating were concentrated in this group; it accounted for 47% of non-immigrant and 65% of immigrant full-year, full-time workers. Among male workers, immigrants had higher average incomes than non-immigrants in each of the four minor fabricating groups. For both immigrants and non-immigrants, the incomes earned by workers who fabricate textile products were substantially lower than the incomes in the other minor groups.

The female-to-male income ratio for immigrants ranged from a high of 0.67 in textiles to a low of 0.62 in metal products fabricating. These ratios were much higher than the 0.54 recorded for product fabricating as a whole; the reason for this lies in the large number of women in the low-

paying textile group. However, female-to-male ratios were still lower among immigrants than among non-immigrants in each of these groups.

Female to male average employment income ratio, 1985

The ratio of female to male earnings was lower among immigrants – meaning the earnings gap between the sexes was larger.



Source: 1986 Census of Canada.

How great an effect does the difference in age structure between immigrant and non-immigrant workers have on the income comparisons among the four minor groups? Average employment incomes for immigrant workers were recalculated (see box next page) using the non-immigrant age distributions (Table 8). These adjusted incomes represent the average employment income immigrants would have if they had the same age distribution as the non-immigrant population. In all cases, for both men and women, the result of this standardization process was a lowering of the average employment income of the

immigrant workers. The average employment income of immigrant male workers fell below that of non-immigrants for all groups except mechanics and repairers. The incomes of female immigrants were less affected by the adjustment.

Table 8
Average employment income (adjusted by age) by occupation (minor groups) and sex, 1985

	Women		Men	
	Immi-grants	Non-immi-grants	Immi-grants	Non-immi-grants
	\$			
Fabricating:				
Metal products	17,300	19,900	27,900	28,800
Electrical	16,900	18,800	26,500	27,500
Textile	12,700	12,800	18,600	18,900
Mechanics and repairers	18,000	20,400	27,000	26,200

Source: 1986 Census of Canada

Educational attainment

Did educational qualifications translate into higher earned incomes for product fabricating workers? In general, the higher the degree, certificate or diploma attained, the higher the average employment income, particularly for men (Table 9).

The difference in income between men with no educational qualifications and those with a high school diploma was small, but a trades certificate significantly increased their average employment income. Educational attainment above the trades level made little difference in the incomes of immigrant male workers, but was associated with higher incomes among non-immigrant men. Since the educational requirements for different jobs within product fabricating vary considerably, the overall findings by education may be affected by the different mixes of fabricating jobs held by immigrant and non-immigrant workers.

Standardization of product fabricating work force by age

In this study the average employment income of immigrants who worked full-year, full-time in 1985 was standardized by age using non-immigrant full-year, full-time workers as the standard population. The formula applied was the following:

$$y^* = \sum y_i \cdot \frac{N_i}{\sum N_i}$$

where

y^* = standardized average employment income for the immigrant population

i = the i^{th} age category

N_i = the number of non-immigrants in the i^{th} age category

y_i = the average employment income of immigrants in the i^{th} age category

Ten-year age groups were used up to age 64, that is, 15-24, 25-34, 35-44, 45-54, 55-64. A separate group was formed for age 65 and over. Standardization of average employment income by educational attainment was also considered for this study but, with the narrow occupational focus, the impact of education was considered minimal.

Table 9
Average employment income for product fabricating workers by highest degree, certificate or diploma, 1985

	Women		Men	
	Immi-grants	Non-immi-grants	Immi-grants	Non-immi-grants
	\$			
None	14,100	15,200	24,000	23,900
High school	14,500	15,700	25,100	24,700
Trades	16,000	16,200	29,100	27,200
Postsecondary certificate or degree	15,700	18,800	29,600	28,700

Source: 1986 Census of Canada

The incomes of female product fabricating workers showed less variation among the schooling categories than those of men. This may have been because of the much larger percentage of female garment workers. These low-skill occupations offer little remunerative advantage for higher educational achievement. The average employment income of immigrant women with trades and higher qualifications was slightly more than for immigrant women with no postsecondary certificate or degree. Non-immigrant women with educational attainment above the trades level had somewhat higher incomes.

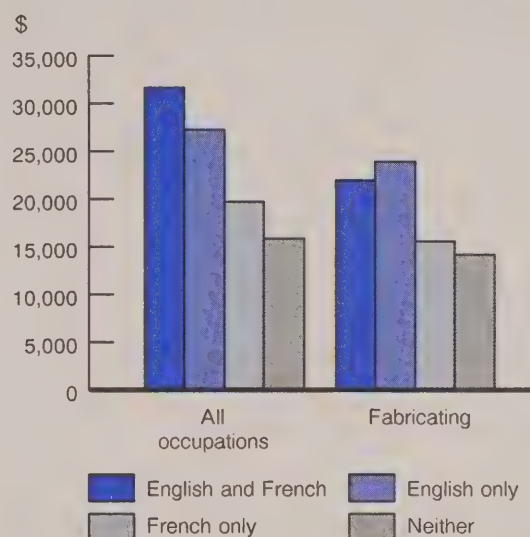
Ability to speak Canada's official languages

When the average employment incomes of immigrant workers in all occupations are compared according to the ability of immigrants to speak Canada's official languages, bilingual workers have a remunerative advantage. Workers who spoke English only had a considerably higher average income than those who spoke French only. Those who spoke neither English nor French had the lowest average income.

Among product fabricating workers, the picture changes. Immigrant fabricating workers who spoke English only reported higher average incomes than bilingual workers. However, two-thirds of these bilingual immigrants worked in the Montreal metropolitan area, where incomes are generally lower than in either Toronto or Vancouver.

Average employment income of immigrant workers by official language, 1985

Bilingual workers generally earn more. But among immigrants in fabricating, they earn less than those who could speak English only.



Source: 1986 Census of Canada.

Summary

Immigrants represented 28% of workers in product fabricating, the highest proportion of immigrants in any major occupational group. Compared with non-immigrants, immigrants in fabricating jobs tended to be older, to have lower levels of educational attainment and to perform different kinds of work. Immigrant women were highly concentrated in textile fabricating jobs, especially as sewing machine operators.

These differences were reflected in the average employment incomes earned by immigrants and non-immigrants in fabricating jobs. The average income of immigrant women in fabricating occupations was lower than that of non-immigrant women, mainly because of the proportionately higher number of immigrant women in low-paying textile jobs. When incomes were recalculated to account for the older age structure of the immigrant population, the income gap was slightly increased. Among men, the average income of immigrant fabricating workers

was higher than that of non-immigrants. However, after standardizing the incomes by age, only the average income of immigrant mechanics and repairers remained higher.

Immigration provides an important supply of labour to the Canadian economy. Although this article has focused on immigrant workers in product fabricating, there are many other occupational groups in which immigrants are found and on which future studies could be based. □

Notes

¹ For an industry perspective on immigrant workers, see *Immigrant women in the clothing industry: Implications for labour adjustment* by S.B. Seward.

² An immigrant is a permanent resident of Canada who is not a Canadian citizen by birth.

³ Data used in this section are from Employment and Immigration Canada, *Immigration Statistics*, 1980-1987. Data for 1987 are unpublished. The "intended occupation" is based on a statement of intention by those who have been granted landed immigrant status (that is, permanent residence status) and may or may not be the occupation realized in the labour market.

⁴ For this article, two unit groups – tailors and dressmakers, and sewing machine operators – have been combined.

⁵ Educational attainment is measured in this article by the highest degree, certificate or diploma obtained as of June 1986.

⁶ The other criteria used in the point system for the admission of the independent class of applicants are age, education, training, occupational skills, the demand for the applicant's occupation in Canada, and the existence of pre-arranged employment.

⁷ The 1986 Census data on knowledge of official languages are based on the respondent's *own* assessment of his or her abilities in these languages.

⁸ Average employment incomes reported in this article are for persons who worked full-year, full-time in 1985. In product fabricating occupations, immigrant full-year, full-time workers accounted for 57% of the immigrant population who had worked at any time since January 1, 1985. The corresponding figure for non-immigrant full-year, full-time workers was 56%.

References

Statistics Canada. "Standard Occupational Classification, 1980." (12-565E), 1981.

Seward, S.B. *Immigrant women in the clothing industry: Implications for labour adjustment*. Institute for Research on Public Policy, Ottawa (forthcoming).

Employment and Immigration Canada. *Immigration Statistics*. (No. MP22-1/1986).

Unemployment and Unemployment Insurance: a tale of two sources

Jean-Marc Lévesque

In 1988, unemployment averaged over one million, based on results from the Labour Force Survey (LFS). But the number of people who received Unemployment Insurance benefits was only 777,000.¹ Despite this gap, the number of beneficiaries actually exceeded the number of unemployed in three provinces. Indeed, beneficiaries outnumbered unemployed nearly two to one in Newfoundland.

What causes this shifting relationship between the official unemployment estimate and the number of Unemployment Insurance beneficiaries? The purpose of this article is to answer this question and review some key concepts underlying the two sources.

The article is divided into two parts. The first puts the data sources in historical perspective. The second outlines conceptual differences between them.

Background

The objectives of the Unemployment Insurance program clearly differ from those of the LFS. The first was designed to replace lost employment income following involuntary job separation. The second measures, among other things, the excess supply of labour.

Jean-Marc Lévesque is with the Labour and Household Surveys Analysis Division. He can be reached at (613) 951-9732.

A little history may help us to better understand the nature of differences in the data emanating from these two sources.

The Unemployment Insurance program

Turn of the century theorists maintained that unemployment did not exist in Canada: the labour market could accommodate every person who wanted a job. The 1913-1915 recession and the 1920-1925 postwar recession began to shake this belief, which finally crumbled in the Depression of the 1930s. In its place grew a conviction that government intervention was needed to fight unemployment. But at what level of government? During the 1920s and 1930s, the federal government had shared with the provincial and municipal level the responsibility of providing for unemployed workers (Struthers, 1983).

The first legislation concerning Unemployment Insurance – the Employment and Social Insurance Act – was enacted by Parliament in 1935 and promptly ruled *ultra vires* by the Supreme Court of Canada. In 1940, the British Parliament amended Canada's constitution, placing Unemployment Insurance under federal jurisdiction. Following this change, Bill 98, creating an unemployment insurance program, was passed by both Houses of Parliament. The first contributions to the program were paid in during July 1940, and the first benefits paid out in January 1942.

The Unemployment Insurance program has evolved since then. Two major changes in particular extended coverage under the program and adjusted premiums and benefits to changing economic conditions. When the second Act came into force in 1955, the program covered 60% of all paid workers, up from 42% in 1940. The third Act, passed in 1972, made the program almost universal; since then, about 96% of all paid workers have been eligible.

The target population – workers eligible for Unemployment Insurance – increased from 2.4 million in 1942 to 12.5 million in 1987. The Dominion Bureau of Statistics (now Statistics Canada) was assigned responsibility for producing Unemployment Insurance statistics by Order-in-Council in 1941.

The Labour Force Survey

The conventional economic theory fashionable in the early 1900s could not explain the severity and above all the persistence of the Great Depression of the 1930s. The Keynesian prescription for fighting high unemployment, involving government intervention to manage the economy, gained credence. However, if government was to intervene effectively, it needed the wherewithal to monitor labour market conditions.

As the Second World War drew to a close, the new economic thinking prompted the federal government to launch a survey capable of producing reliable and up-to-date information on the labour market. The immediate concern was the massive task of reintegrating returning servicemen into the labour market. What was needed was a comprehensive picture of employment and unemployment, and a good understanding of the characteristics of the labour force. The Labour Force Survey was thus launched in 1945.

In developing this large-scale survey – with a sample of nearly 30,000 households in 1945 – the Dominion Bureau of Statistics benefitted from the experience gained by the United States since their own survey was mounted in 1940. The definition of employment and unemployment used for the survey would ultimately be adopted by the International Labour Organization (ILO) in 1954.²

Initially conducted on a quarterly basis, the survey became monthly in November 1952. In 1960, Parliament accepted the recommendation by an inter-departmental committee on unemployment statistics that the Labour Force Survey be considered the official source on unemployment.

Statistics Canada thus offers two sources of unemployment data: one based on the administration of a government program and accordingly labelled as administrative data; the other based on a household survey designed to gather a broad range of labour market data.

These two programs differ not only in their objectives, but also in their coverage. While the administrative data relate to the insured population, the survey data concern the entire population aged 15 and over. While the administrative data centre on the notion of benefit claims and program eligibility, the survey data focus on labour market activity and availability. Program eligibility has varied in time and space; the concept of activity has remained constant (although some definitions and questions have been modified) and is uniform across the country.

To avoid any possibility of confusion, the terms "unemployment" and "unemployed workers" in the text below refer to the official concept.

Bridging the gap

The beneficiary population includes certain groups that would probably not satisfy the LFS definition of unemployment. Similarly, the unemployed include groups unlikely to be eligible for Unemployment Insurance. As we shall see, the gap between estimates derived from the two sources of data is reduced if these groups are removed from both sides of the equation.

Unemployment Insurance data

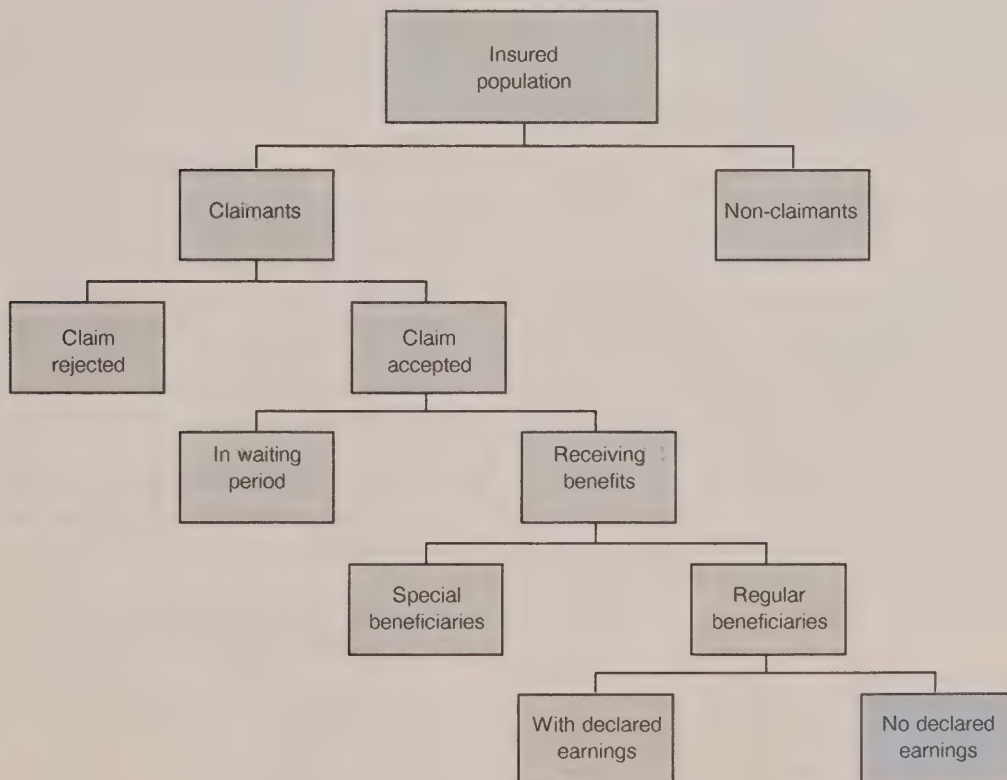
Labour market studies based on Unemployment Insurance data generally focus on

one of two series: claimants or regular beneficiaries without declared earnings.

A **claimant** is a person who submitted an Unemployment Insurance claim during a specified period. This group, which includes all those who will eventually receive benefits as well as those who are excluded or deemed ineligible, is always much larger than the number of unemployed.³ The use of the claimant series stems from the fact that it is a *current* source of information on small areas.

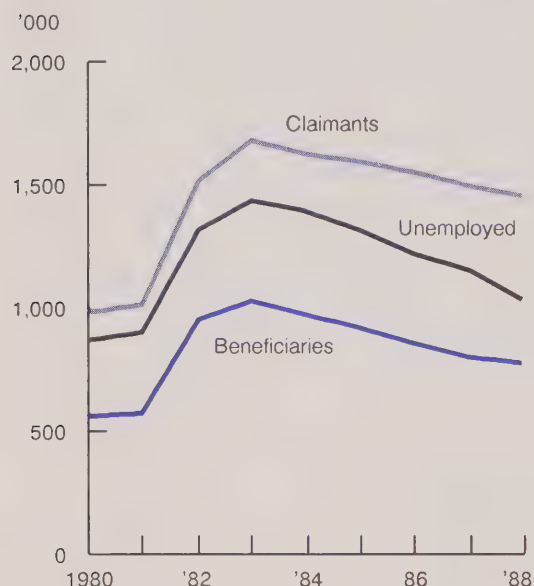
The number of **regular beneficiaries without declared earnings** has been published by Statistics Canada since 1975. This series approximates the LFS

Regular beneficiaries with no declared earnings in the Unemployment Insurance program



Claimants, unemployed persons and beneficiaries (annual averages)

The unemployment level falls between the number of claims received and the number of beneficiaries.



Source: *Labour Force Survey and Unemployment Insurance Statistics.*

unemployment concept. It excludes recipients of benefits paid for work absences due to sickness, accident or maternity. In the LFS, these beneficiaries would generally be counted as employed or as outside the labour force, depending on the return-to-work agreement with the employer. Regular beneficiaries who have declared earnings from employment are also excluded. The LFS would classify these beneficiaries as employed.

Still, some regular beneficiaries without declared earnings would not be counted as unemployed by the LFS, notably those not actively seeking a job. A case in point is seasonal workers living in regions

where labour demand during the slack period is minimal. Job search under these conditions may seem somewhat futile, a fact which is taken into consideration in administering the Unemployment Insurance program. (Elsewhere, beneficiaries are asked for proof of job search.)

Labour Force Survey data

In the Labour Force Survey, the unemployed are persons who were without work during the reference week, who had looked for work in the past four weeks and who were available for work. Persons laid off temporarily or waiting to start a new job in the next four weeks are also classified as unemployed, even if they did not look for work.

The unemployed include several groups unlikely to receive Unemployment Insurance benefits. On the other hand, some persons who would be regarded by the LFS as being outside the labour force are very likely to be included among the beneficiaries.

The wealth of LFS information on the characteristics and activities of the unemployed and of persons not in the labour force can be used to create a series approximating that of regular beneficiaries with no declared earnings (Lévesque, 1987). This LFS series, called "potential beneficiaries" is created by drawing together a subset of the unemployed and a subset of persons not in the labour force.

The "unemployed" component consists of all unemployed persons except for the following:

- unemployed persons aged 65 and over (4,000 on average in 1988)
- unemployed full-time students (59,000)⁴
- unemployed persons who have never worked (25,000)

- those who last worked more than twelve months ago (186,000)⁵
- those who were self-employed before becoming unemployed or who were unpaid workers in a family business (28,000)
- unemployed persons who are probably still in the UI waiting period (108,000). Eligible beneficiaries must wait at least two weeks before receiving benefits.⁶

The "not in the labour force" component consists of persons who meet *all* of the following criteria:

- between 15 and 64 years of age
- lost a paid worker job in the past twelve months
- looked for work in the past six months (but not in the past four weeks)
- interested in working
- available for work.

To sum up, the official 1988 unemployment estimate was 1,031,000. To arrive at an estimate of "potential beneficiaries", 410,000 unemployed persons were excluded because they appeared to be ineligible for Unemployment Insurance. Then 58,000 persons classified as not in the labour force were added in because they appeared to satisfy the UI requirements. The net effect is 680,000 potential beneficiaries.

The number of potential beneficiaries is very close to the number of regular beneficiaries with no declared earnings in provinces with an average or below average unemployment rate. There is still a considerable gap, however, in provinces with an above average unemployment rate. This difference can be eliminated by slightly amending the definition of potential beneficiaries to include all persons not in the

labour force who have lost a job in the past year, regardless of whether or not they have looked for work in the past six months.

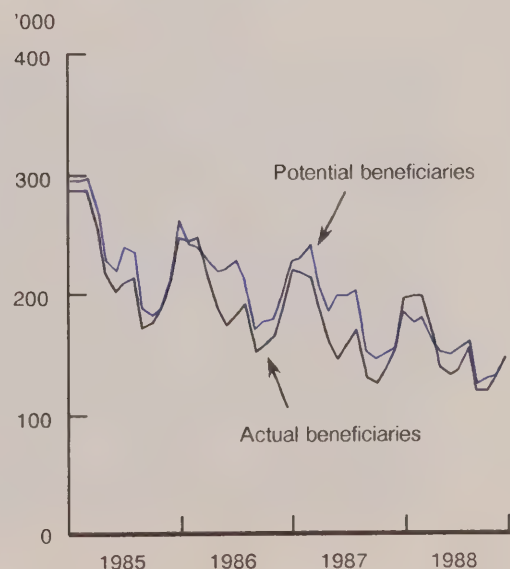
Results for these two potential beneficiaries series are presented below, using Ontario and Newfoundland as case studies. These two provinces were selected because they were at the extreme ends of the spectrum of provincial unemployment rates in 1988. Accordingly, results for Ontario are based on the first definition of potential beneficiaries and results for Newfoundland on the second.

Potential and actual beneficiaries in Ontario

The adjustments outlined above yield an estimate of 153,000 potential beneficiaries

Potential and actual beneficiaries, Ontario (monthly data)

The number of potential beneficiaries marginally exceeds the number of actual beneficiaries.



Source: *Labour Force Survey and Unemployment Insurance Statistics*.

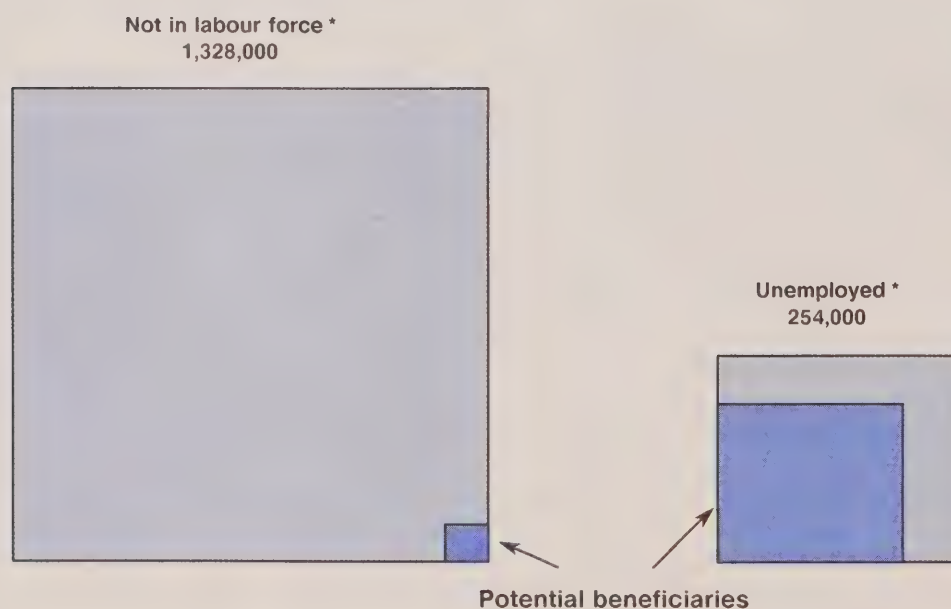
Table 1
From "unemployed" to "potential
beneficiaries": groups removed and
added, Ontario

	1988
Unemployed (15-64)	254,000
Students and persons who have never worked	- 30,000
Persons who have not worked in the past twelve months	- 35,000
Last job: self-employed or unpaid family worker	- 6,000
Probably in waiting period	- 35,000
Not in the labour force	
Lost a paid worker job in the past year, looked in the past six months, available and interested in working	+ 5,000
Potential beneficiaries (LFS)	153,000
Actual beneficiaries (UI)	151,000

for Ontario on average in 1988 (Table 1). This figure is almost identical to the number of regular beneficiaries with no declared earnings.

The series of potential and actual beneficiaries in Ontario generally follow a similar path over the course of the year. By age and sex, the two series are nearly identical for men aged 25 to 64 but among 15 to 24 year-olds, the number of potential beneficiaries exceeds the number of actual beneficiaries, especially during the summer. This undoubtedly reflects the fact that young people are often ineligible for Unemployment Insurance because they have worked an insufficient number of weeks. Moreover, young people may earn too little or work too few hours per week to be eligible for Unemployment Insurance.

Composition of potential beneficiaries group, Ontario, 1988



* Persons aged 15-64

Source: Labour Force Survey.

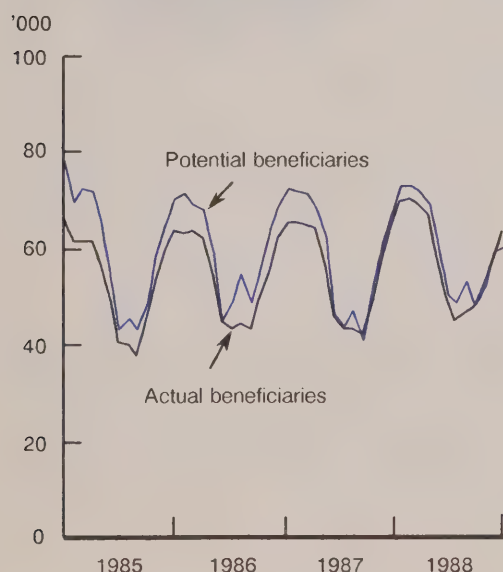
The pattern among women aged 25 to 64 is similar to that observed among young people. In the case of women, however, the gap between the two series is narrower.

Potential and actual beneficiaries in Newfoundland

In 1988, Newfoundland had the highest unemployment rate (16.4%) in Canada. But the number of unemployed aged 15 to 64, at 38,000, was well below the number of actual beneficiaries (58,000, see Table 2).

Potential and actual beneficiaries, Newfoundland (monthly data)

The large seasonal swings in the number of actual beneficiaries are reflected in the potential beneficiaries series.



Source: Labour Force Survey and Unemployment Insurance Statistics.

The gap between the number of unemployed and the number of actual beneficiaries stems from the fact that many workers who lose their jobs do not actively look for another one. As we have already mentioned, this tends to occur in regions where job opportunities are limited.

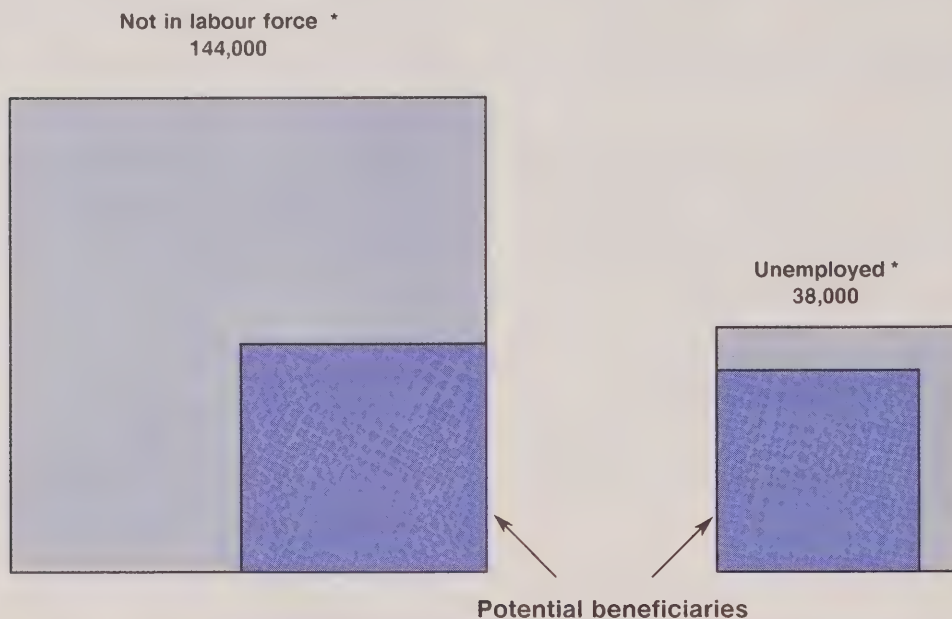
Table 2
From "unemployed" to "potential beneficiaries": groups removed and added, Newfoundland

	1988
Unemployed (15-64)	38,000
Students and persons who have never worked	--
Persons who have not worked in the past twelve months	- 6,000
Last job: self-employed or unpaid family worker	--
Probably in waiting period	- 3,000
Not in the labour force	
Lost a paid worker job in the past year, looked in the past six months, available and interested in working	+ 9,000
Lost a paid worker job in the past year and have not looked for work in the past six months *	+ 24,000
Potential beneficiaries (LFS)	60,000
Actual beneficiaries (UI)	58,000

* Group added only in Newfoundland, which has a relatively high unemployment rate.

The definition of potential beneficiaries that worked well for Ontario yields an estimate for Newfoundland which is too low (36,000 potential versus 58,000 actual beneficiaries). If the active job search criterion is dropped, however, the estimate of potential beneficiaries is very close to the actual beneficiaries figure.

Composition of potential beneficiaries group, Newfoundland, 1988



* Persons aged 15-64

Source: Labour Force Survey.

Conclusion

Not all unemployed workers are covered by Unemployment Insurance, and not all Unemployment Insurance beneficiaries are unemployed. After outlining the

major conceptual differences it was shown that a group of "potential beneficiaries" could be identified in the Labour Force Survey using criteria similar to those used by the Unemployment Insurance program. □

Notes

¹ This refers to regular beneficiaries without declared earnings. This group excludes those who receive "special" sickness, accident, maternity or occupational training benefits. Regular beneficiaries who declared earnings during the reference week are also excluded from this series, as well as self-employed fishermen drawing fishing program benefits.

² The definition of unemployment was amended in 1960 to include temporary layoffs, formerly classified as employed. The survey questionnaire was completely overhauled in 1975, but the concepts of employment and unemployment remained fundamentally the same.

³ For some years, Employment and Immigration Canada has made its electronic claimant files available by special request. (Confidentiality is ensured by blocking out personal information.) This information can be used to approximate the official unemployment series by eliminating special benefit claimants but several differences remain. On the one hand, the claimants file includes a number of persons who have started to work again (there is a five-week wait before closing a file); on the other hand, the unemployed include persons who do not qualify for unemployment insurance or do not claim benefits.

⁴ Full-time students usually cannot receive regular benefits since they do not meet the criterion of availability for work. Beneficiaries who take approved courses are not counted as regular beneficiaries. The LFS includes full-time students among unemployed workers if they are looking for a part-time job but not if they are looking for a full-time job.

⁵ The chances of this category of unemployed receiving regular benefits are minimal. The maximum period covered by the program has been twelve months ever since the Act of 1971 came into force. There are, however, four exceptions:

- a) sick persons and those who have been injured or quarantined;
- b) persons in a detention centre;
- c) those who have taken a training program approved by Employment and Immigration Canada; and
- d) those receiving Workers' Compensation.

⁶ The waiting period – the time between job separation and the receipt of benefits – is two weeks. This waiting period is mandatory for all and may be extended by a one-week to six-week penalty period depending on the circumstances under which employment was terminated. Workers who quit their jobs voluntarily may be penalized six weeks. The waiting period for layoffs is two weeks with no penalty. To simulate these circumstances in the LFS, we must refer to several questions. If the person worked immediately before becoming unemployed, we can check whether he or she is likely to be receiving benefits by looking at the length of unemployment. But if the person was not in the labour force before becoming unemployed, the time he or she has been without work will exceed the length of unemployment, and the former rather than the latter should be used. (The LFS measures the length of unemployment in weeks, but the time that a person is without work is measured in months.)

References

Lévesque, J.-M. *A Comparison of Unemployment Data from Two Sources: The Unemployment Insurance Program and the Labour Force Survey*, Staff Reports. Statistics Canada, April 1987.

Struthers, J. *No Fault of Their Own: Unemployment and the Canadian Welfare State, 1914-1941*, The State and Economic Life Series. University of Toronto Press, 1983.

Dominion Bureau of Statistics. *Annual Report on Benefit Years Established under the Employment Insurance Act, 1942*.

Statistics Canada. *Unemployment Insurance Statistics: Annual Supplement to 73-001 monthly*. (73-202S), 1989.

Sources

A potpourri of information: survey news, including special surveys conducted as supplements to the Labour Force Survey; notes on research projects inside and outside Statistics Canada; recent publications and data releases; other items of news and future events.

Special surveys

Labour market and income surveys conducted by Statistics Canada during the last quarter of 1989.

■ October 1989 Survey of Literacy Skills Used in Daily Activities

This national survey on the literacy skills of Canadian adults is sponsored by the Department of the Secretary of State of Canada. The governments of Newfoundland, New Brunswick, Ontario and Alberta have contributed to the survey to increase the sample size in their province.

In April 1989, a pilot survey was sponsored by the Secretary of State and Employment and Immigration Canada to test the adequacy of the collection instruments and respondent reaction. The results were primarily used to adjust the collection methodology and instruments for the main survey.

The main survey will identify the ease with which Canadians handle tasks commonly faced in everyday life. Its objectives are threefold:

- to provide a direct multi-dimensional assessment of the literacy skills of Canadian adults
- to provide a self-assessment of the literacy skills and associated needs of persons in the workplace, in search of work and in their daily living
- to identify groups in Canadian society whose literacy skill levels place them at high risk.

Literacy skills in the survey are defined as "the information processing skills necessary to use the printed material commonly encountered at work, at home and in the community". This definition applies to reading, writing and numeracy skills.

The two main components of the survey are a background questionnaire and a series of tasks that measure *directly* the defined levels of skills.

Data collection took place in October 1989 through personal interviews at the homes of respondents. The sample included close to 14,000 persons. The first results are to be released in summer 1990, International Literacy Year.

Contact: Gilles Montigny at (613) 951-9731. □

■ October 1989 Disability Methods Test

Accurate data on the number of disabled adults in Canada are important in program planning and policy considerations for this population group. Yet estimates of the number of disabled persons in Canada vary from survey to survey. The Disability Methods Test has been designed to assess the impact of different data collection methods on the estimates.

Disabilities are measured through a standard set of questions related to limitations in the activities of daily living (ADL). The information is collected by interview.

Four aspects of data collection procedures are thought to have some impact on the response rates and, therefore, on the estimates that are ultimately produced:

- survey context – administration of the ADL questions in a general health survey context as opposed to a specific disability survey context
- interview mode – personal interviews as opposed to telephone interviews
- interview type – interviews with disabled persons as opposed to proxy interviews
- follow-up – administration of a large follow-up survey to respondents identified as disabled from the ADL questions.

These findings formed the basis for conducting the Disability Methods Test. The objective of this experimental study is to determine what effect each permutation of these factors (excluding follow-up) has on estimates of levels of disability.

Data collection activities took place in late October. Data capture and processing are scheduled over the period November 1989 to January 1990, and the results of this study are to be reported to the Employment Equity Working Group in spring 1990.

Contact: Pierre Foy at (613) 951-9479. □

■ November 1989 Alberta Apprentice/Journeymen and Work Reduction Survey

Apprenticeship, as measured by this survey, is a combination of on-the-job and technical training which leads to certification by the province as a qualified journeyman. In Alberta, the apprenticeship program comes under the direction of the Apprenticeship and Trade Certification Branch of Alberta Manpower, this survey's sponsor. This is the third year the survey has been conducted. Its purpose is to determine the number of employed and unemployed journeymen and apprentices by trade, and the number of journeymen and apprentices not working in their trade.

Contact: Denis Lefebvre at (613) 951-4600. □

■ November/December 1989 National Apprenticeship Survey

In any one year, approximately 15,000 individuals across Canada complete their apprenticeship and become journeymen, and approximately 12,000 to 14,000 discontinue apprenticeship training. The National Apprenticeship Survey, sponsored by Employment and Immigration Canada (EIC), will interview a sample of both those who have completed and those who have discontinued a registered apprenticeship program in 1986 or 1987.

Through telephone interview, information will be collected from the sample group on their labour market experiences and continuing attachment to their trade since completing or discontinuing an apprenticeship program. The survey will also include a measure of geographical mobility of "completers" and "discontinuers" two years after. Mobility is of special interest given the efforts over the last few years to establish inter-provincial standards for a number of trades (particularly construction), and the concerns of certain provinces that a disproportionate share of their apprentices leave the province after completing their training.

The results of the National Apprenticeship Survey will be used for many purposes including program evaluation and occupational projections. For example, Employment and Immigration Canada's Canadian Occupational Projections System (COPS) will use the data to improve its projections of the demand by occupation for workers.

Contact: Phil Stevens at (613) 951-9481. □

New Labour Force Survey questions on educational attainment

In December 1988 a new set of educational attainment questions was tested on a national subsample of the Labour Force Survey (LFS). The test questions were designed to identify secondary school completion, to provide more detail than the current LFS questions on postsecondary education, and to produce a set of estimates which were more compatible with Census measures. For example, the number of categories for postsecondary education was expanded from three to six to include trades certificates and diplomas from vocational schools and apprenticeship training, and university certification below, at and above the bachelor level.

Analysis of the test results are contained in a report, available on request. Data estimates using the new questions on educational attainment, with minor modifications to those used in the test, will be available in the LFS as of January 1990.

For further information on the Educational Attainment Test and the report contact Joanne Moloney at (613) 951-4626. For information on the proposed changes to *The Labour Force* (71-001), contact H  l  ne Lavoie at (613) 951-2301. □

Income microdata files – an important research resource

Since 1971, microdata files combining individual and family income, with demographic, labour force and housing information (collected in the annual Survey of Consumer Finances and the Household Facilities and Equipment Survey) have been available for analysts with specialized data needs. These needs may involve manipulation of microdata records or statistical modelling. Each microdata file has been carefully reviewed to prevent the identification of individuals, families or households. For the 1987 income year, the most recent available, there are five microdata files:

■ *Individual file*

A file of approximately 80,000 individuals 15 years of age and over, containing income sources, demographic, labour force and family related information for each individual.

■ *Census family file*

■ *Economic family file*

Each of these files, containing approximately 45,000 records, includes a wide variety of income, demographic and labour force information at the family level. There is also information related to the head and spouse of each family.

■ *Household file*

A file of approximately 33,000 household records focusing on household income, the characteristics of the dwelling and the household facilities and equipment associated with the dwelling. The 1987 version of the household file has been enriched with the addition of shelter cost information from the 1987 Shelter Cost Survey, a new initiative sponsored by Statistics Canada and Canada Housing and Mortgage Corporation.

■ *Key file*

The purpose of this file of 115,000 records is to allow linkages between the four files described above. This facility was first available for the 1986 income year. The key file should be of interest to researchers because of the additional flexibility and freedom of choice it allows. Variables that do not exist on any of the other files can be created by the use of the key file in conjunction with the other files. For example, if the age groups for children on the family file are inappropriate for a specific purpose, this can be changed with the key file.

The household file costs \$1,000; the other four cost \$800 each. For further information on these files, contact Kevin Bishop at (613) 951-2211. □

1989 NWT labour force survey

The Northwest Territories Bureau of Statistics conducted a labour force survey from mid-January to mid-March 1989. The survey covered every community in Northwest Territories; information was collected by personal interview for over 16,000 residents.

The survey questionnaire was developed in consultation with an interdepartmental working group, the Government of

the Northwest Territories regional offices and Statistics Canada. Statistics Canada was consulted during the development of the questionnaire to ensure comparability with national labour force statistics.

1989 NWT Labor Force Survey: Overall Results and Community Detail, published in June 1989, is the first in a series of reports. It contains general and regional highlights and a series of tables showing labour force activity information for the native and non-native population by region; for males and females by region, ethnic group, and age; and labour force activity by community. The report also contains a series of tables comparing the 1989 data with results from the 1986 Census and from a previous labour force survey undertaken by the NWT Bureau of Statistics during winter of 1984-85. The latest survey shows that:

- There were an estimated 34,650 persons living in Northwest Territories who were 15 years of age and over. Of these, a total of 24,250 were either employed or unemployed, resulting in a labour force participation rate of 70% (76% for men and 63% for women).
- The unemployment rate for Northwest Territories was 16% (17% for men and 15% for women).
- The labour force participation rate was 56% among native people compared to 88% for non-natives. The unemployment rate was 30% for native persons, but only 5% for non-natives.

Further reports will cover such topics as education and language characteristics of the working-age population; traditional activities; seasonal patterns of unemployment; industry and occupation; and alternative definitions of unemployment.

For more information on the 1989 NWT labour force survey, contact David A. Stewart, GNWT Bureau of Statistics, at (403) 873-7147. □

Two new analytic reports

The Analytic Report Series of the Labour and Household Surveys Analysis Division continues to grow. (See Vol. 1 No. 2. of *Perspectives* for a description of previously published reports.)

Giving Freely: Volunteers in Canada

Between November 1986 and October 1987, over five million Canadians aged 15 years and over volunteered their time and skills to groups and organizations across the country. They contributed over one billion hours of their time – the equivalent of over half a million full-time, full-year jobs. *Giving Freely: Volunteers in Canada* presents results from the Survey of Volunteer Activity, which was sponsored by the Department of the Secretary of State of Canada. It examines, for example, the personal characteristics of volunteers, the nature of their volunteer activities, the types of organizations they serve, and the amount of time they spend volunteering.

(71-535, No.4/Order No. 71-602; \$28)

Labour Force Survey Economic Regions, 1986 Census

Monthly Labour Force Survey results are published for 71 economic regions – areas of broadly uniform industrial structure – but the sample is too small to warrant the publication of much information beyond the most basic labour market indicators. More detailed 1986 Census information on these economic regions is now available. Comparison of these regional profiles shows that:

- The ten economic regions with the highest percentage of self-employment were all located in the Prairies, reflecting the influence of the agricultural sector.
- In the economic region containing Durham, York, Toronto and Peel, over four in ten persons aged 15 years and over were born outside Canada.
- This same economic region had the highest average household income in 1985 (\$42,884), followed by the economic region surrounding and including Calgary (\$40,588).

Labour Force Survey Economic Regions, 1986 Census provides data on labour force activity by age group; income of individuals and families; occupation by sex; ethnic origin; language; place of birth; and educational attainment.

(71-535, No.5/Order No. 71-604; \$37) □

How to order

Send orders to Publication Sales, Statistics Canada, Ottawa, Ontario K1A 0T6. Or, call toll free 1-800-267-6677 for a credit card order.

Analytical Studies Branch: research paper series

The Analytical Studies Branch of Statistics Canada began a research paper series in 1986. To date, 21 papers have been published, including a number that deal with labour and income topics.

Research Paper No. 2, 1987

Unemployment and Training

G. Picot

Training programs for the unemployed are often seen as the key to improving the

labour adjustment process. But, to what degree is training actually utilized by the unemployed? Using logistic regression and data from two surveys, the probability of taking training is determined for various groups of unemployed persons.

The results show that being unemployed significantly increases the likelihood of training. Yet, those unemployed who face the most difficult adjustment experiences are least likely to turn to training.

Research Paper No. 4, 1987

Modelling the Lifetime Employment Patterns of Canadians

G. Picot

Data from the Family History Survey (FHS) are used to study links between family circumstances and the movement of Canadians – particularly women – into and out of employment. Transition probabilities as a function of age, sex, marital status, age of youngest child and educational attainment are examined. The transition probabilities are also conditioned upon labour market status in the previous year, and the duration of that status. The goal was to develop an employment sub-model of a larger Lifetime Income and Pension Policy Simulation Model (LIPPS).

Research Paper No. 5, 1987

Job Loss and Labour Market Adjustment in the Canadian Economy

G. Picot and T. Wannell

This paper assesses the labour market adjustment experiences of Canadian workers who were permanently laid off between 1981 and 1984. Data from a special survey (the Survey of Displaced Workers) were used to answer a number of questions including:

- What types of workers were most likely to experience job loss and in which industries or occupations did they work?

- What happened to these workers when their jobs were abolished? Did they adjust relatively quickly and successfully, finding new jobs in a short time at the same income level, or did a significant number spend long periods seeking new jobs and undergo large pay cuts?

- How many turned to retraining or relocation in an attempt to find a new job?

Circumstances varied from one worker to another. Nearly one quarter of the workers who found new jobs did so within three weeks, while 10% took more than a year. Of those finding new jobs, 45% took pay cuts. On the whole, these permanently laid off workers fared poorly compared with the rest of the labour force: their average unemployment rate in January 1986 was 25%, more than double the national average.

Research Paper No. 9, 1987

The Expanding Middle

J. Myles

This study addresses recent debates over trends in class structure that have emerged from the "de-skilling" debate. The general conclusion from this analysis of census and survey data is that actual patterns and trends in the skill distribution of jobs are more complex than either of the "de-skilling" or "upgrading" theses would indicate. During the '60s and '70s, the skill level of the labour force grew at an accelerating rate because of the "new middle class" professional, technical and managerial occupations. For working-class occupations, patterns are more ambiguous: the census-based distribution of occupations ranked by skill shows a monotonic pattern of upgrading, while survey results for the early '80s suggest a split or dual labour market.

The employment shift from the goods sector to the service sector resulted in changes in the skill distribution. Future changes, however, will occur largely within the service sector simply because that is where most jobs now are located. The Canadian service economy, like the American, is marked by a dichotomy in the skill distribution: a contingent rather than a necessary feature of a post-industrial economy.

Research Paper No. 16, 1988

Integration of Canadian Farm and Off-farm Markets and the Off-farm Work of Women, Men and Children

R. D. Bollman and P. Smith

As off-farm work becomes more common among farm family members, the integration of the farm enterprise and family with the non-farm economy grows. Over time, farm enterprises have sold a growing share of their produce. Larger shares of their output have been based on cash inputs and, at least since the last war, greater reliance has been put on borrowed capital and paid labour.

To understand the integration of the farm family with the off-farm economy, the farm business situation must be distinguished from the farm family situation. For the farm family, income from off-farm investments and from off-farm jobs is increasingly important to farm family income. One off-farm factor – high interest rates – has had a negative impact on farm business income but a positive impact on the income of some farm families.

Research Paper No. 17, 1988

Wages and Jobs in the 1980s: Changing Youth Wages and the Declining Middle

J. Myles, G. Picot and T. Wannell

This paper is also available in the Analytical Studies Series of the Labour Market Activity Survey. A description was given in the

Autumn issue of *Perspectives on Labour and Income*.

Research Paper No. 21, 1989

Consumption, Income and Retirement

A. L. Robb and J. B. Burbridge

This analysis uses Canadian Family Expenditure Survey data from 1969 to 1982 to estimate consumption and income age-profiles for married-couple families. Particular attention is paid to the transition between work and retirement. The findings differ from some of the common presumptions of existing life-cycle models.

To obtain copies of these research papers contact Judy Buehler at (613) 951-5960. □

Labour Market Activity Survey Publications

Two further publications in the Labour Market Activity Survey's *Profile Series* are to be released by the end of 1989: *Canada's Unionized Workers: A Profile of Their Labour Market Experiences* (71-214, \$11); and *Pension Plan Coverage in 1986* (71-217, \$11). These are the fifth and sixth publications in the series. The first four profiled men, women, youth and older workers.

For information on how to obtain the Labour Market Activity Survey publications, contact Richard Veevers at (613) 951-4617. □

Studies underway at the Economic Council

The Unemployment Issues Group at the Economic Council of Canada is engaged in a number of research projects. The following studies are complete or near completion.

Dr. Robert Campbell (Trent University) has undertaken a study under contract for the Economic Council. *A Review of the Commitment to the Full Employment Objective, Canada 1945-1985* examines whether a commitment to full employment is a realistic policy objective for Canada. It looks at the historical development of full employment objectives since World War II in Canada and in other countries, including some countries where full employment has been a policy priority. The study also presents a discussion of the trade-offs involved with a full employment strategy.

Professors Robert Coen (Northwest University) and Bert Hickman (Stanford University) have recently completed a report entitled *Real Wages, Aggregate Demand, and Unemployment in Canada*. This study, also done under contract for the Economic Council, examines several questions: Is there a real-wage productivity gap in Canada? Are real wages too high? Does real-wage unemployment exist in Canada?

Under the project, *Dynamics of Unemployment in Canadian Labour Markets*, a series of studies are in progress for the period 1977 to 1987 using Annual Work Patterns Survey (AWPS) data and Labour Market Activity Survey (LMAS) data. This analysis will provide material for a number of papers, two of which are nearing completion: *Canadian Unemployment in*

Retrospect: 1977-1987 and *The Duration of Unemployment and the Dynamics of Labour Sector Adjustment*. Both of these works are by Miles Corak, who has also recently completed a study under the same project entitled *Eligibility Rules in the Canadian Jobs Strategy: Shifting the Burden or Targeting the Assistance*. This study addresses some of the policy questions underlying the Canadian Jobs Strategy.

Surendra Gera and Syed S. Rahman et al. have completed two papers on structural unemployment in Canada. The first paper, *Help-Wanted Index, Job Vacancies, and Structural Unemployment in Canada*, focuses on the mismatches in the labour market and the role of long-term unemployment in creating structural unemployment both nationally and regionally. The second paper, *Sectoral Shifts and Canadian Unemployment: Evidence From the Micro Data*, examines the appropriateness of the sectoral shifts hypothesis in explaining Canada's high and persistent unemployment. An important feature of this paper is a discussion of sectoral uncertainties that inhibit labour mobility.

For further information on the projects and studies undertaken by the Unemployment Issues Group at the Economic Council of Canada, contact Surendra Gera at (613) 952-2156. □



ROCK SOLID INFORMATION

Get a focus on Canada's markets and business opportunities with **the** source of reliable information...Statistics Canada and its unequaled family of outstanding publications and services.

Relying on Statistics Canada means you're building your decisions on hard facts assembled by a professional organization with a world-wide reputation for scrupulous accuracy and complete reliability.

Join the thousands of corporations and individuals who base their Canadian business decisions on Statistics Canada publications. Year after year.

For more information on Statistics Canada's extensive range of publications and information services, please call toll-free 1-800-267-6677.

At Statistics Canada, we provide information you can build on.

Key labour and income facts

The following selection of labour and income indicators is drawn from 11 sources and includes published and unpublished annual data. The first 50 indicators appear in every issue and the remainder address a different topic each time.

The latest available annual data are always shown; as results become available, the indicators are updated so that every issue contains new data. An indicator updated since the last issue is "flagged" with an asterisk.

Data sources

The indicators are derived from the following sources:

1-11 & 15	Labour Force Survey Frequency: Monthly Contact: Ken Bennett (613) 951-4720
12-14	Labour Market Activity Survey Frequency: Annual Contact: Richard Veevers (613) 951-4617
16	Absence from Work Survey Frequency: Annual Contact: Denis Lefebvre (613) 951-4600
17	Workers' Compensation Statistics Frequency: Annual Contact: Joanne Proulx (613) 951-4040
18	Help-wanted Index Frequency: Monthly Contact: André Picard (613) 951-4045
19-21	Unemployment Insurance Statistics Frequency: Monthly Contact: André Picard (613) 951-4045

22-29	Survey of Employment, Payrolls and Hours Frequency: Monthly Contact: Howard Krebs (613) 951-4063
30-32	Labour Income (Revenue Canada Taxation-based statistics) Frequency: Quarterly Contact: Ed Bunko (613) 951-4048
33-43	Survey of Consumer Finances Frequency: Annual Contact: Kevin Bishop (613) 951-2211
44-50	Household Facilities and Equipment Survey Frequency: Annual Contact: Penny Barclay (613) 951-4634
51-53	Health and Activity Limitation Survey Frequency: Ad hoc Contact: Janet Morrison (613) 951-0025

Notes on the method of deriving certain indicators are given at the end of the table.

Additional data

The table provides at most two years of data for each indicator. A longer time series (generally 10 years) for this set of indicators can be obtained on request on paper or diskette at a cost of \$50. (A more extensive explanation of the indicators is also available.) This 10-year data set will be updated annually in April. Contact: Joanne Bourdeau (613) 951-0525.

Key labour and income facts

No.	Unit	Year	Canada	Nfld.	P.E.I.	N.S.	N.B.
Labour Market							
1	Labour force	'000	1987 13,011	223	60	399	312
			1988 13,275	231	62	408	318
	Change	%	2.0	3.6	3.0	2.2	1.9
2	Participation rate	%	1987 66.2	53.2	62.9	59.9	58.2
			1988 66.7	54.6	64.0	60.8	58.8
3	Employed	'000	1987 11,861	183	52	350	272
			1988 12,245	193	54	366	280
	Change	%	3.2	5.5	3.2	4.6	3.2
4	Proportion of employed working part-time	%	1987 15.2	10.8	15.1	16.1	15.0
			1988 15.4	11.2	15.0	15.5	15.4
5	Proportion of part-timers wanting full-time work	%	1987 26.5	60.7	34.8	38.2	40.6
			1988 23.7	58.8	34.5	35.5	36.4
6	Unemployed	'000	1987 1,150	40	8	49	41
			1988 1,031	38	8	42	38
	Change	%	-10.4	-5.1	1.3	-15.0	-6.6
7	Official unemployment rate	%	1987 8.8	17.9	13.2	12.3	13.1
			1988 7.8	16.4	13.0	10.2	12.0
Alternative Measures of Unemployment							
8	Unemployed 14 or more weeks as a proportion of labour force	%	1987 3.8	8.2	5.4	5.4	5.6
			1988 3.1	7.7	5.2	4.2	4.8
9	Unemployment rate:						
	- of persons heading families with children under age 16	%	1987 7.9	16.5	13.1	11.5	11.6
			1988 6.9	15.8	13.7	9.6	11.2
	- excluding full-time students	%	1987 8.7	17.8	13.5	12.2	13.0
			1988 7.6	16.6	13.4	10.0	11.9
	- including full-time members of the Canadian Armed Forces	%	1987 8.8	17.9	13.0	11.9	12.9
			1988 7.7	16.4	12.8	9.9	11.8
	- of full-time labour force	%	1987 10.6	20.6	16.2	15.1	15.9
			1988 9.4	19.3	16.0	12.7	14.6
	- of part-time labour force	%	1987 11.5	21.2	8.0	14.1	13.9
			1988 9.8	17.1	7.2	12.8	13.2
	- including persons on the margins of the labour force	%	1987 9.7	22.1	15.2	13.4	15.5
			1988 8.5	20.2	15.0	11.1	14.0
10	Underutilization rate based on hours lost through unemployment and underemployment	%	1987 11.1	21.6	16.7	15.7	16.6
			1988 9.9	20.1	16.5	13.4	15.2
11	Proportion unemployed 6 months or longer	%	1987 23.5	24.5	17.2	22.8	22.5
			1988 20.2	23.9	16.2	21.0	19.9

See notes at end of table.

Key labour and income facts

Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Year	Unit	No.
3,253	4,992	531	489	1,268	1,482	..	..	1987	'000	1
3,311	5,118	535	488	1,290	1,514	..	..	1988		
1.8	2.5	0.7	-0.3	1.7	2.2	..	..		%
63.3	69.0	66.5	66.4	72.0	65.6	..	..	1987	%	2
64.0	69.6	66.7	66.4	72.4	65.7	..	..	1988		
2,918	4,689	492	453	1,147	1,306	..	..	1987	'000	3
3,001	4,862	494	451	1,187	1,358	..	..	1988		
2.8	3.7	0.3	-0.5	3.5	4.0	..	..		%
13.5	15.2	16.9	16.9	15.5	17.9	..	..	1987	%	4
13.6	15.6	16.9	17.1	15.5	17.9	..	..	1988		
34.5	17.8	23.4	26.7	25.0	33.7	..	..	1987	%	5
32.6	15.3	21.7	26.5	20.4	28.6	..	..	1988		
335	304	39	36	122	177	..	..	1987	'000	6
311	256	42	37	103	157	..	..	1988		
-7.2	-15.7	6.5	1.9	-15.5	-11.3	..	..		%
10.3	6.1	7.4	7.4	9.6	11.9	..	..	1987	%	7
9.4	5.0	7.8	7.5	8.0	10.3	..	..	1988		
5.1	2.2	2.7	3.0	3.9	5.4	..	..	1987	%	8
4.4	1.5	2.9	3.1	3.0	4.4	..	..	1988		
										9
9.0	5.5	6.0	6.3	8.2	10.8	..	..	1987	%	
8.1	4.4	6.2	6.5	7.3	9.4	..	..	1988		
10.2	5.8	7.1	7.1	9.3	11.8	..	..	1987	%	
9.3	4.7	7.5	7.4	7.8	10.3	..	..	1988		
10.3	6.1	7.3	7.3	9.5	11.8	..	..	1987	%	
9.4	5.0	7.7	7.5	7.9	10.3	..	..	1988		
12.5	6.9	9.1	9.4	11.1	14.6	..	..	1987	%	
11.5	5.8	9.2	9.6	9.2	12.8	..	..	1988		
11.2	10.3	9.9	9.6	13.3	14.5	..	..	1987	%	
10.6	8.2	10.9	9.4	11.2	11.2	..	..	1988		
11.9	6.4	7.9	7.8	10.0	12.5	..	..	1987	%	
10.6	5.3	8.3	8.0	8.3	10.8	..	..	1988		
12.8	7.5	9.6	10.1	11.8	15.3	..	..	1987	%	10
11.9	6.3	9.9	10.2	9.8	13.3	..	..	1988		
30.5	16.7	18.1	19.8	20.6	26.6	..	..	1987	%	11
25.7	12.7	16.6	20.8	19.0	22.0	..	..	1988		

See notes at end of table.

Key labour and income facts

No.		Unit	Year	Canada	Nfld.	P.E.I.	N.S.	N.B.
Other Labour Market Indicators								
12	Employed at some time in year, male, age 16 to 69	'000	1986	7,560	151	36	235	191
	– as proportion of male population age 16 to 69	%		87.4	80.7	87.8	82.7	82.0
	Employed at some time in year, female, age 16 to 69	'000	1986	5,987	109	29	187	149
	– as proportion of female population age 16 to 69	%		67.4	58.0	69.0	62.1	61.8
13	Unemployed at some time in year, male, age 16 to 69	'000	1986	1,601	63	11	63	56
	– as proportion of male population age 16 to 69	%		18.5	33.7	26.8	22.2	24.0
	Unemployed at some time in year, female, age 16 to 69	'000	1986	1,441	45	9	58	46
	– as proportion of female population age 16 to 69	%		16.2	23.9	21.4	19.3	19.1
14	Full-time, full-year male paid workers	'000	1986	4,039	53	14	117	90
	Full-time, full-year female paid workers	'000	1986	2,468	35	10	71	53
15	Days lost per worker per year through illness or for personal reasons		1987	8.6	8.9	--	7.4	8.3
			1988	9.2	9.1	--	8.6	8.7
*16	Proportion of paid workers absent two or more consecutive weeks because of illness or accident	%	1987	6.3	4.4	5.1	6.1	6.4
			1988	6.4	5.1	5.7	4.7	6.0
17	Workers receiving workers' compensation for time-loss injuries	'000	1986	587	9	2	13	10
	Change	%	1987	603	9	2	12	11
				2.7	4.9	6.9	-7.0	10.2
18	Help-wanted index (1981 = 100)		1987	135	156			
			1988	149	180			
Unemployment Insurance								
19	Total beneficiaries	'000	1987	1,033	68	13	51	57
	Change	%	1988	1,015	71	13	50	58
				-1.8	5.2	0.7	-2.0	0.9
20	Total beneficiaries as a proportion of contributors	%	1986	9.0	29.3	23.0	13.7	18.7
			1987	8.2	28.4	22.0	13.0	17.9
*21	Regular beneficiaries without reported earnings	'000	1987	800	55	10	40	46
	Change	%	1988	780	58	10	39	47
				-2.5	5.2	0.1	-2.8	1.6

See notes at end of table.

Key labour and income facts

Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Year	Unit	No.
1,928	2,850	306	289	733	843	..	..	1986	'000	12
84.5	90.0	89.0	90.0	90.4	85.6	..	..		%
1,434	2,331	256	229	601	661	..	..	1986	'000	13
60.6	71.4	72.1	71.6	74.9	65.8	..	..		%
459	457	58	50	167	217	..	..	1986	'000	14
20.1	14.4	13.8	13.7	17.3	19.1	..	..		%
377	482	49	44	139	192	..	..	1986	'000	15
15.9	14.8	13.8	13.7	17.3	19.1	..	..		%
1,013	1,682	154	130	370	416	..	..	1986	'000	16
632	998	109	80	237	242	..	..	1986	'000	
9.8	8.6	8.4	7.1	7.0	8.0	..	..	1987		17
9.5	9.7	9.7	7.5	8.3	7.7	..	..	1988		
7.4	6.1	6.0	4.0	5.9	6.2	..	..	1987	%	18
8.1	6.2	6.2	5.2	5.5	5.5	..	..	1988		
213	196	23	16	42	62	..	1	1986	'000	19
217	205	23	16	41	66	..	1	1987		
1.6	4.8	-4.2	-1.3	-2.4	7.3	..	17.4		%	20
155	167	69			79	..	..	1987		
172	180	82			96	..	..	1988		21
316	231	33	29	90	142	2	2	1987	'000	
323	216	35	29	78	139	2	2	1988		22
2.2	-6.4	3.7	0.2	-12.9	-2.3	-2.9	-10.8		%	
11.3	5.6	7.1	7.8	8.1	11.0	11.0	4.9	1986	%	23
10.2	4.8	6.9	7.8	7.7	10.6	10.5	5.4	1987		
252	166	25	22	70	111	1	1	1987	'000	24
259	151	26	22	60	106	1	1	1988		
2.5	-9.0	3.2	-1.1	-14.1	-3.9	-3.8	-13.6		%	

See notes at end of table.

Key labour and income facts

No.		Unit	Year	Canada	Nfld.	P.E.I.	N.S.	N.B.
Earnings (including Overtime) and Hours								
22	Average weekly earnings in current dollars	\$	1987	442.74	423.64	362.07	400.02	407.39
	Change	%	1988	463.80	443.99	379.26	417.92	421.15
				4.8	4.8	4.7	4.5	3.4
23	Average weekly earnings in 1981 dollars	\$	1987	320.36	313.34	275.34	295.22	298.89
	Change	%	1988	322.53	320.57	278.05	298.09	298.26
				0.7	2.3	1.0	1.0	-0.2
24	Average weekly earnings of salaried employees in current dollars	\$	1987	542.06	497.27	460.15	497.27	500.92
	Change	%	1988	568.10	524.26	493.20	516.66	523.26
				4.8	5.4	7.2	3.9	4.5
25	Average weekly earnings of salaried employees in 1981 dollars	\$	1987	392.23	367.80	349.92	366.99	367.51
	Change	%	1988	395.06	378.53	361.58	368.52	370.58
				0.7	2.9	3.3	0.4	0.8
26	Average weekly earnings of hourly paid employees in current dollars	\$	1987	353.34	338.48	240.59	315.52	331.19
	Change	%	1988	370.45	353.66	256.22	330.64	342.13
				4.8	4.5	6.5	4.8	3.3
27	Average weekly earnings of hourly paid employees in 1981 dollars	\$	1987	255.67	250.36	182.96	232.86	242.99
	Change	%	1988	257.61	255.35	187.84	235.83	242.30
				0.8	2.0	2.7	1.3	-0.3
28	Average weekly hours of hourly paid employees	hrs	1987	32.0	35.2	32.2	32.8	33.8
			1988	32.1	35.5	32.6	33.0	34.0
29	Average weekly overtime hours of hourly paid employees	hrs	1987	1.1	1.4	0.4	0.7	0.8
			1988	1.1	1.7	0.5	0.7	0.9
Labour Income								
30	Labour income in current dollars	\$ million	1987	296.0	3.9	0.9	7.3	5.7
	Change	%	1988	322.7	4.2	0.9	7.9	6.1
				9.0	8.0	8.4	7.6	7.7
31	Labour income per employee in current dollars	\$	1987	28,500	24,700	20,200	23,800	23,600
	Change	%	1988	30,100	24,800	21,200	24,500	24,600
				5.5	0.6	4.9	2.9	4.1
32	Labour income per employee in 1981 dollars	\$	1987	20,600	18,300	15,400	17,600	17,300
	Change	%	1988	20,900	17,900	15,600	17,500	17,400
				1.4	-1.8	1.1	-0.7	0.5
33	Net income from self-employment as a proportion of money income	%	1986	6.0	5.7	8.6	6.2	5.4
			1987	6.7	4.9	12.4	6.6	4.3

See notes at end of table.

Key labour and income facts

Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Year	Unit	No.
430.88	456.35	407.85	406.00	450.28	453.42	513.29	609.53	1987	\$	22
454.01	482.68	422.05	411.30	462.76	466.52	556.24	621.17	1988		
5.4	5.8	3.5	1.3	2.8	2.9	8.4	1.9		%	
308.21	324.11	299.01	300.96	338.30	342.20	..	..	1987	\$	23
313.11	327.46	297.01	291.91	338.27	339.78	..	..	1988		
1.6	1.0	-0.7	-3.0	-0.0	-0.7	..	..		%
515.73	563.40	509.43	523.70	564.86	544.62	599.58	692.29	1987	\$	24
540.82	595.71	536.17	527.58	585.04	564.90	666.78	695.96	1988		
4.9	5.7	5.2	0.7	3.6	3.7	11.2	0.5		%	
368.91	400.14	373.48	388.21	424.39	411.03	..	..	1987	\$	25
372.98	404.15	377.32	374.44	427.66	411.43	..	..	1988		
1.1	1.0	1.0	-3.5	0.8	0.1	..	..		%
352.68	365.11	312.89	295.96	327.68	374.10	405.32	484.96	1987	\$	26
372.12	384.77	321.24	301.31	340.60	390.19	437.86	521.54	1988		
5.5	5.4	2.7	1.8	3.9	4.3	8.0	7.5		%	
252.27	259.31	229.39	219.39	246.19	282.34	..	..	1987	\$	27
256.63	261.04	226.07	213.85	248.98	284.19	..	..	1988		
1.7	0.7	-1.4	-2.5	1.1	0.7	..	..		%
32.9	32.4	31.1	28.8	30.4	30.0	31.8	33.7	1987	hrs	28
32.8	32.5	30.7	28.7	30.8	30.2	32.9	33.3	1988		
0.9	1.2	0.9	0.7	1.2	0.8	2.8	3.6	1987	hrs	29
1.0	1.3	0.8	0.8	1.4	0.9	2.8	4.9	1988		
72.9	126.4	10.8	8.2	27.0	31.8	1.1		1987	\$million	30
79.5	139.0	11.5	8.6	29.3	34.5	1.2		1988		
9.2	10.0	6.5	4.5	8.2	8.4	9.1			%	
28,300	30,200	26,100	24,200	27,300	28,100	..	..	1987	\$	31
29,900	32,100	27,500	24,800	28,900	29,100	..	..	1988		
5.8	6.3	5.5	5.8	5.8	3.6	..	..		%
20,200	21,500	19,100	17,900	20,500	21,200	..	..	1987	\$	32
20,600	21,800	19,400	17,600	21,100	21,200	..	..	1988		
2.0	1.5	1.3	-1.6	3.0	-0.0	..	..		%
5.2	5.7	6.9	12.3	5.7	6.6	..	..	1986	%	33
5.8	6.2	7.6	13.4	7.9	7.3	..	..	1987		

See notes at end of table.

Key labour and income facts

No.		Unit	Year	Canada	Nfld.	P.E.I.	N.S.	N.B.
Earnings of Full-time, Full-year Workers								
34	Average earnings of men working full-time, full-year	\$	1986	30,200	25,500	24,100	28,700	27,000
			1987	31,900	27,800	25,200	30,300	27,600
	Change	%		5.6	8.8	4.8	5.8	2.3
35	Average earnings of women working full-time, full-year	\$	1986	19,900	16,800	17,200	18,100	17,400
			1987	21,000	17,900	17,900	18,500	18,100
	Change	%		5.8	6.2	3.9	2.3	4.3
36	Ratio of female to male earnings	%	1986	65.8	66.1	71.7	63.1	64.3
			1987	65.9	64.5	71.1	61.0	65.6
Family Income								
37	Average family income	\$	1986	41,200	30,400	32,000	35,400	33,300
			1987	43,600	33,700	34,800	38,100	35,200
38	Median family income	\$	1986	36,900	26,400	28,100	30,700	30,200
			1987	38,900	29,800	30,900	34,300	31,800
39	Average income of unattached individuals	\$	1986	17,600	12,100	13,200	15,400	15,100
			1987	18,700	14,600	13,800	15,900	13,700
40	Median income of unattached individuals	\$	1986	13,300	9,200	9,500	11,900	11,000
			1987	14,400	10,000	10,600	11,600	10,500
41	Proportion below the low-income cutoff (1978 base):							
	Families	%	1986	11.8	20.4	9.2	14.0	13.5
			1987	11.3	18.9	10.0	11.7	14.4
	Unattached individuals	%	1986	34.6	48.3	42.0	36.5	39.0
			1987	33.5	45.3	32.9	37.7	45.6
	Persons (Population)	%	1986	14.5	22.1	13.2	16.2	15.8
			1987	14.1	20.8	12.9	14.7	16.9
	Children (less than 16 years)	%	1986	17.0	25.7	14.9	19.3	18.8
			1987	16.9	25.9	16.1	16.8	20.5
	Elderly (65 years and over)	%	1986	18.9	21.9	18.4	18.3	17.4
			1987	17.3	20.4	12.3	15.8	18.2
42	Average family taxes	\$	1986	7,200	4,300	4,400	5,700	4,800
			1987	8,100	5,100	5,000	6,600	5,500
43	Average family income after tax	\$	1986	34,000	26,100	27,600	29,700	28,500
			1987	35,500	28,600	29,800	31,600	29,700

See notes at end of table.

Key labour and income facts

Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Year	Unit	No.
28,100	32,100	26,200	25,700	31,300	31,700	..	..	1986	\$	34
30,700	33,600	27,900	27,000	32,000	32,900	..	..	1987		
9.2	4.8	6.7	5.1	2.2	3.7	..	..		%
19,500	20,700	18,300	17,600	20,100	20,000	..	..	1986	\$	35
20,500	22,000	19,200	17,900	20,800	21,900	..	..	1987		
5.4	6.1	4.6	1.9	3.8	9.6	..	..		%
69.2	64.6	70.0	68.4	64.1	63.2	..	..	1986	%	36
66.8	65.4	68.6	66.3	65.1	66.7	..	..	1987		
38,100	45,800	37,900	37,000	43,700	40,600	..	..	1986	\$	37
40,100	49,000	39,700	39,100	44,400	42,600	..	..	1987		
34,100	41,100	33,300	32,200	39,300	36,900	..	..	1986	\$	38
35,500	43,800	35,800	35,100	40,000	38,000	..	..	1987		
15,300	18,900	18,000	16,200	18,800	19,100	..	..	1986	\$	39
17,100	20,700	16,900	16,600	19,200	18,900	..	..	1987		
11,200	14,700	14,600	11,900	14,500	14,700	..	..	1986	\$	40
12,600	16,200	12,500	12,900	15,000	15,900	..	..	1987		
										41
14.6	8.5	13.0	15.5	10.1	13.2	..	..	1986	%	
13.9	7.8	11.9	12.4	12.7	13.0	..	..	1987		
44.6	28.8	29.1	33.7	31.5	32.9	..	..	1986	%	
40.7	28.5	35.9	33.4	31.5	31.2	..	..	1987		
17.6	10.6	16.3	19.2	13.1	16.5	..	..	1986	%	
16.8	10.3	15.9	15.9	15.6	15.7	..	..	1987		
18.6	12.9	21.9	24.9	14.8	19.9	..	..	1986	%	
19.0	12.3	21.9	18.9	19.9	18.6	..	..	1987		
26.7	13.8	17.0	17.7	16.1	21.5	..	..	1986	%	
25.2	12.7	15.4	13.9	13.8	19.9	..	..	1987		
6,800	8,400	5,900	6,000	7,300	6,800	..	..	1986	\$	42
7,700	9,300	6,700	6,500	8,400	7,800	..	..	1987		
31,300	37,400	31,900	31,000	36,500	33,800	..	..	1986	\$	43
32,400	39,700	34,500	33,000	32,600	36,000	..	..	1987		

See notes at end of table.

Key labour and income facts

No.		Unit	Year	Canada	Nfld.	P.E.I.	N.S.	N.B.
Households & Dwellings								
44	Average household income	\$	1986 1987	36,400 38,500	28,800 31,700	28,800 31,300	32,000 34,100	30,700 31,900
*45	Proportion of households with:							
	VCRs	%	1987 1988	45.2 52.0	45.4 50.0	34.9 43.2	44.7 51.8	43.2 51.3
	Microwaves	%	1987 1988	43.3 53.8	22.1 34.3	34.9 45.5	35.5 48.5	32.9 48.3
	Two or more automobiles	%	1987 1988	25.5 25.1	15.3 14.5	25.6 22.7	19.4 18.4	19.2 20.6
	Vans and trucks	%	1987 1988	23.3 24.3	30.1 31.3	30.2 31.8	25.7 25.6	31.2 34.9
	Air conditioners	%	1987 1988	19.9 20.8	... ...	-- --	3.0 3.6	3.8 4.6
46	Proportion of owner-occupied dwellings	%	1987 1988	62.8 62.5	81.0 77.1	74.4 75.0	71.7 70.9	75.6 76.5
47	Proportion of all owner-occupied dwellings which are mortgage-free	%	1987 1988	49.9 50.0	70.5 72.7	56.3 54.5	57.3 56.2	56.5 56.0
48	Number of occupied dwellings in need of repairs	'000	1987 1988	2,410 2,469	52 56	10 14	105 110	78 75
49	Dwellings in need of repair as a proportion of all occupied dwellings	%	1987 1988	26.5 26.7	31.9 33.7	23.3 31.8	34.5 35.6	33.3 31.5
50	Median rent-to-income ratio	%	1987 1988	20 21	18 18	24 22	22 23	20 22
Disabled Persons Limited at Work, Age 15-64, Who Are Not Institutionalized:								
51	Population:							
	Both sexes	'000	1986	1,255.2	28.7	6.1	55.8	44.0
	Men			615.5	14.9	3.2	28.5	22.2
	Women			639.6	13.7	2.9	27.3	21.8
52	Employed:							
	Both sexes	'000	1986	378.9	5.2	1.8	16.6	11.3
	Men			236.5	3.6	1.2	10.6	7.6
	Women			142.4	1.6	0.6	6.0	3.7
53	Completely unable to work:							
	Both sexes	'000	1986	615.7	16.3	3.1	29.3	24.3
	Men			259.1	8.4	1.6	14.5	10.9
	Women			356.6	7.9	1.6	14.9	13.3

Key labour and income facts

Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Year	Unit	No.
33,500	40,400	33,600	32,200	38,700	35,000	..	..	1986	\$	44
35,600	43,400	34,300	33,800	38,900	37,000	..	..	1987		
										45
43.8	46.3	47.9	39.9	49.6	43.6	..	..	1987	%	
49.0	54.2	49.7	47.2	58.0	50.7	..	..	1988		
36.7	44.3	53.7	57.0	56.5	44.3	..	..	1987	%	
49.0	54.6	55.3	64.0	64.9	55.0	..	..	1988		
20.6	29.4	26.6	25.0	30.4	24.6	..	..	1987	%	
21.7	28.3	22.6	24.3	30.1	24.7	..	..	1988		
13.8	18.1	31.6	43.3	39.7	33.9	..	..	1987	%	
14.6	20.1	31.1	45.3	40.4	32.4	..	..	1988		
13.5	32.6	38.9	24.4	9.2	7.0	..	..	1987	%	
13.1	35.6	39.5	27.7	7.8	6.9	..	..	1988		
55.3	62.9	68.2	72.2	63.2	64.9	..	..	1987	%	46
55.3	63.2	66.1	70.9	63.9	63.0	..	..	1988		
47.3	48.9	53.7	60.7	45.8	47.4	..	..	1987	%	47
44.1	50.4	55.8	57.5	47.2	49.7	..	..	1988		
561	903	114	120	221	245	..	..	1987	'000	48
565	930	122	100	218	279	..	..	1988		
23.8	27.5	30.0	33.7	26.8	21.8	..	..	1987	%	49
23.4	27.8	32.1	27.9	25.7	24.4	..	..	1988		
19	21	22	24	20	23	..	..	1987	%	50
20	20	23	23	22	23	..	..	1988		
										51
294.1	457.7	55.2	49.5	110.6	151.4	0.7	1.4	1986	'000	
142.1	221.2	26.0	25.8	52.3	78.1	0.4	0.7			
152.0	236.5	29.2	23.7	58.3	73.2	0.3	0.7			
										52
58.3	143.3	24.5	21.3	44.2	51.5	0.3	0.6	1986	'000	
40.2	88.4	14.7	13.5	24.0	32.1	0.2	0.4			
18.2	54.9	9.7	7.7	20.2	19.5	0.1	0.3			
										53
179.5	227.0	20.1	19.0	38.9	57.9	0.1	0.1	1986	'000	
71.6	95.0	6.9	8.0	17.2	25.0	0.1	--			
107.9	132.0	13.3	11.0	21.8	33.0	0.1	0.1			

Notes and Definitions

2 Labour force as a proportion of the population aged 15 and over.

7 Unemployed as a proportion of the labour force.

8 This rate, and rates shown as Indicators 9 and 10, are described in *The Labour Force* (71-001), February 1987.

9 The full-time labour force includes persons working full-time, those working part-time involuntarily and unemployed persons seeking full-time work.

The part-time labour force includes persons working part-time voluntarily and unemployed persons seeking part-time work.

On the margins of the labour force includes persons not looking for work because they believe none is available or because they are waiting for recall or for replies from employers.

10 The rate shows hours lost through unemployment (unemployed multiplied by average actual weekly hours) and through underemployment (that is, short-time work schedules and involuntary part-time employment) as a proportion of hours worked plus hours lost.

30 Labour income comprises gross wages and salaries (including directors' fees, bonuses, commissions, gratuities, taxable allowances and retroactive pay) and supplementary labour income (payments made by employers for the benefit of employees, including contributions to health and welfare schemes, pension plans, workers' compensation and unemployment insurance).

31 Labour income per employee is calculated using LFS estimates of paid workers excluding those absent without pay.

41 For an explanation of the methodology underlying the low-income cutoff, see *Income Distributions by Size in Canada* (13-207).

Back Issues : *Did you miss something?*

Don't worry! Back issues of **Perspectives on Labour and Income** are available. Feature articles in these issues include :

- | | |
|--------------------|---|
| Summer 1989 | Youth for Hire • Canada's Unemployment Mosaic
• On Maternity Leave • The Changing Face of Temporary Help
• Earnings of Bilingual Workers |
| Autumn 1989 | The Canadian Auto Industry • The Labour Market : Mid-year Report
• Unionization and Women in the Service Sector • Vacations
• Help-wanted Index • Discouraged Workers |

The above issues cost just \$12.50 each.

Contact **Publication Sales, Statistics Canada, Ottawa, Ontario, K1A 0T6.**

Or, for faster service, call toll-free **1-800-267-6677** and use your VISA or MasterCard.

Perspectives on Labour and Income
The quarterly for labour market information

In the works

Here are some of the topics to be featured in upcoming issues of Perspectives on Labour and Income:

■ **High tech industries**

What does high tech mean? After reviewing some of the possible definitions, one is selected to examine employment and earnings trends in high tech industries from 1976 to 1986.

■ **The distribution of wealth in Canada and the United States**

Are Canadians as wealthy as Americans? Is Canadian wealth more concentrated? Differences between Canada and the United States in the composition of wealth are analyzed by family characteristics.

■ **Nursing in Canada**

Registered nurses now form the largest professional occupation in Canada. This study examines the labour market characteristics and job satisfaction of this group.

■ **Measuring labour underutilization by hours lost**

Estimating unemployment and underemployment based on hours gives a different view of the Canadian labour market – reflecting, for example, involuntary part-time employment and short-time work schedules.

■ **Pensions: working today for tomorrow**

The amount of money tied up in pension funds was five times the federal deficit in 1988. A look at the pension plan coverage in the private and public sectors and the investment of these pension funds.

■ **Single-industry towns**

Many communities depend on one industry for a high proportion of employment. This study will examine the concept and role of single-industry towns in modern-day Canada.

■ **Highly qualified workers: have skills, will travel**

Do persons who have specialized skills have more flexibility to move in order to find employment to their choosing? This study takes a look at the mobility of 1982 university and community college graduates.

PERSPECTIVES ON LABOUR AND INCOME

The quarterly for labour market information.

PERSPECTIVES

ON LABOUR AND INCOME

NEW FROM STATISTICS CANADA

- ☐ **Yes, I want PERSPECTIVES ON LABOUR AND INCOME (75-001E) for \$50 a year (\$60 a year for subscriptions outside of Canada).**

Order Form

Mail to:
Publications Sales
Statistics Canada
Ottawa, Ontario K1A 0T6

(Please print)

Company _____

Department _____

Attention _____

Title _____

Address _____

City _____

Province/Country _____

Postal Code _____

Tel. _____

Reference Number _____

METHOD OF PAYMENT

Order Number _____

Payment enclosed _____

Charge to my:

() MasterCard () Visa () Statistics Canada

Account No. _____

Expiry Date _____

() Bill me later

Signature _____

PF 03502

Cheque or money order should be made payable to the Receiver General of Canada/Publications, in Canadian funds or equivalent.

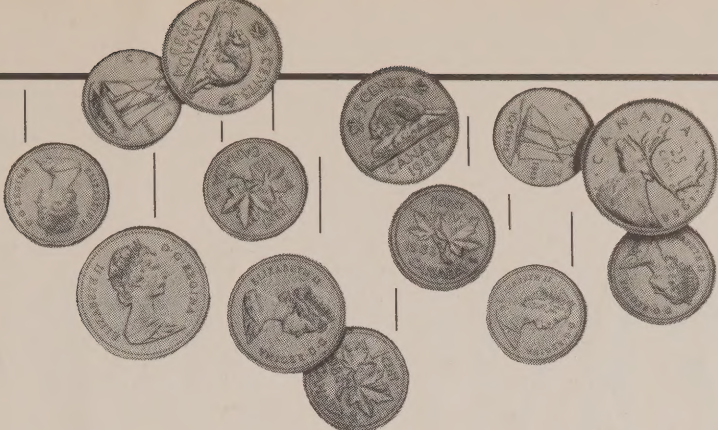
For faster service



1-800-267-6677



MasterCard or Visa accounts



What happened to the cost of living last month?

The **Consumer Price Index** will tell you.

Whether you negotiate wage settlements, administer COLA clauses in labour contracts, assess government policies or are involved in renewal contracts, child support or alimony payments, you need current and detailed information on changes in the cost of living.

Compiled monthly (and published within 20 days of the month's end), the **Consumer Price Index** gives you a precise account of the latest fluctuations in consumer prices.

This monthly publication covers:

- transportation
- food
- clothing
- housing

- health and personal care
- recreation, reading and education
- tobacco products and alcoholic beverages

Over 400 items, ranging from milk to parking, household furnishings to reading material, are included.

Price indexes are presented nationally and for 18 major Canadian cities. In each issue you receive month-to-month percentage comparisons and trends over the last five years. And each issue analyzes the main causes of changes.

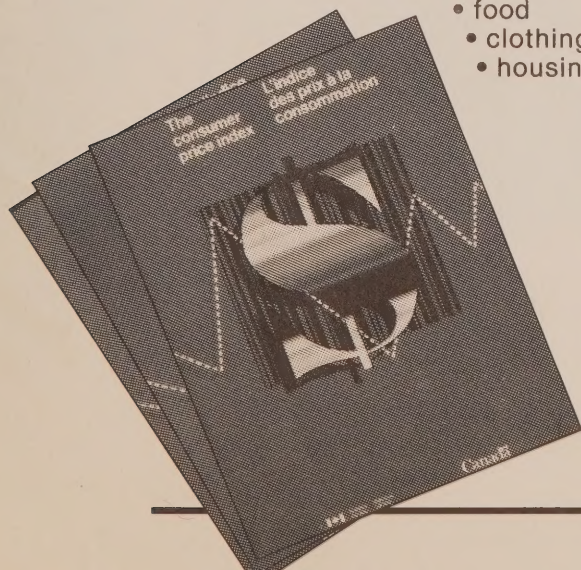
Get the facts.

Subscribe to the **Consumer Price Index** (Catalogue No. 62-001) for the authoritative measure of the purchasing power of the Canadian consumer dollar. A subscription to this monthly is available for \$89 in Canada, and \$107 outside Canada.

To order, write Publication Sales, Statistics Canada, Ottawa, Ontario, K1A 0T6, or contact the nearest Statistics Canada Reference Centre listed in this publication.

For faster service, using Visa or MasterCard, call toll-free,

1-800-267 6677



PERSPECTIVES

ON LABOUR AND INCOME

Do you need to know about . . .

- trends in the labour force as Canada enters a decade of free trade?
- the distribution of income and wealth in our aging population?
- new income and labour market data sources and their uses?
- updates on research underway in the labour and income field?

. . . then you need

PERSPECTIVES ON LABOUR AND INCOME (75-001E).

The new journal from Statistics Canada.

A yearly subscription to **Perspectives on Labour and Income** (four issues) costs just \$50.

Mail or FAX your order to Publication Sales, Statistics Canada, Ottawa, K1A 0T6 (**FAX 1-613-951-1584**). For faster service, call toll free **1-800-267-6677** and use your VISA or MasterCard.